CITY AND COUNTY OF BRISTOL

ANNUAL REPORT
OF THE MEDICAL OFFICER OF HEALTH, 1946

My Lord Mayor, Ladies and Gentlemen,

I have the honour to submit my report on the state of the public health and sanitary circumstances of the city for the year 1946.

The Ministry of Health in Circular 13/47 dated the 13th March, 1947, have requested that the report shall follow the lines on which it has been prepared during the war years and for reasons of economy in paper and labour, be once again in abridged form. There are certain subjects of current interest which the Minister wishes to be included; amongst these are tuberculosis (including the allowances scheme), venereal disease (including the tracing of contacts and follow-up of defaulters), the progress of diphtheria immunisation (including action taken under paragraphs 7 and 9 of Circular 194/45 of 14th November, 1945), the care of premature infants and of illegitimate children, and of the steps taken to combat infestation. The Minister also requires the inclusion of a statement giving certain information in regard to the water supply of the area.

The report is arranged in two main parts: (a) a summary of the work of the department during the year; (b) appendices, including special reports and statistics.

I wish to express my indebtedness for the courtesy at all times extended to me by the Chairmen and members of various committees, and particularly to the Chairmen of the Health and Education Committees and also to the chief officers of the Corporation, whose co-operation has greatly facilitated the work of the department throughout the year. I wish to thank sincerely my colleagues in the Health Department for their loyalty and willing help and to take this opportunity of recording a sincere welcome to all members of the staff who have recently returned from serving in His Majesty's Forces.

It is with great regret that I refer to the death of Mr. F. E. Needs, the late City Analyst.

Mr. Needs came to Bristol in 1906 as an assistant to the City Analyst and was appointed to the position of Public Analyst in August, 1934. Mr. Needs also held the offices of Official Agricultural Analyst and Gas Examiner for the city. His appointment came soon after the inauguration of the Department of Preventive Medicine and the greatly increased work of the department, as well as the co-ordination of the city and university work, was greatly assisted by the tact and enthusiasm with which he managed his department.

Dr. Marguerite G. Hughes retired in November, 1946, owing to ill health. She had been in the service of the Health Committee for 20 years and since 1928 had held the post of chief assistant medical officer for maternity and child welfare. Her work, in a period of considerable expansion of duties falling on the department, was conscientious and thorough. She was a loyal member of the staff, popular with her colleagues. We wish her many more happy years and our thanks and best wishes go To [illegible] her.

This report was prepared with the assistance of Mr. L. R. Rogers, to whom I tender my best thanks.

I am, my Lord Mayor, Ladies and Gentlemen,

Your obedient Servant,

R. H. PARRY,

Medical Officer of Health.

Department of Public Health,
Kenwith Lodge, Westbury Park,
Bristol 6. *August,* 1947.

I. VITAL STATISTICS.

Tables covering the vital statistics for the city are included in the Appendix pages 100-108. These figures are based on the information supplied by the Registrar-General, who has directed attention to the fact that the estimates of the numbers and distribution of the non-civilian population are not available and that non-civilian deaths and non-civilian notifications are excluded. The estimated population from 1940 onwards is therefore the civilian population only and the various rates calculated on this basis are in consequence slightly overstated, whilst the rates for 1943 to 1945 are also subject to some further adjustment consequent on the correction of the Registrar-General's estimate of population for these years.

Estimated civilian population (mid-year) ...	417,090
Marriages	3,818
Rate per 1,000 population	18.31
Births	8,041
Rate per 1,000 population	19.28
Stillbirths	217
Rate per 1,000 total births	26
Deaths	4,897
Rate per 1,000 population	11.75
Natural increase per 1,000 population	7.54
Deaths under 1 year	299
Rate per 1,000 births	37
Deaths under 1 month	192
Rate per 1,000 live births	23.87
Deaths from puerperal causes	18
Rate per 1,000 total births	2.18

In the following short paragraphs are mentioned the principal features of the published figures.

Population.

The estimated civilian population of the city at mid-1946 is 417,090, an increase of 2,770 on the figure supplied for mid-1945. Provisional figures mentioned by the Registrar-General in his quarterly return of births, marriages and deaths shows the estimated civilian population at December 31st as having increased to 452,320. The difference between this figure and that now estimated for mid-1946 is explained by the Registrar-General as being due to a correction recently applied, namely: In December, 1943, an adjustment of +34,160 was made to the estimate of Bristol population. Later, more reliable information at the disposal of the Registrar-General revealed that this was an increase far in excess of the requirements of the time and to bring it into line with all available data, the mean civilian population estimate for 1946 has been reduced by 25,000.

No corrected figures of estimated population for the years 1943, 1944 and 1945 have as yet been received from the Registrar-General, to enable any necessary correction in the rates for these years published in previous reports to be made.

Marriages (Rate: 18.31 per 1,000 population).

There were 3,818 marriages during the year ended 31st December, 1946. During the preceding 12 months there were 3,919. These figures compare with a peak number of 5,099 marriages in 1940 and a low figure of 3,071 in 1944.

Births (Rate 19.28 per 1,000 population).

In common with the rest of the country, Bristol is experiencing an increase in the birth rate, a total of 8,929 live births having been registered as born in the city in 1946. This is approximately 1,000 more than in the previous year, an increase of 12½% compared with 27% for the great towns of England and Wales as registered by the Registrar-General's weekly statistical return.

The total number of births for 1946 includes 1,105 (1,107 in 1945) cases non-resident in the city giving a figure of 7,824 babies born in Bristol to Bristol residents (6,802 in 1945). To this figure must be added the number of Bristol babies born outside the city boundary, viz., 217, giving a corrected Registrar-General's figure of total Bristol births, 8,041.

Of the total births, 6,895 occurred in institutions in the city and of these 3,576 were in the Health Committee's hospitals—2,896 in Southmead Hospital and 680 at Mortimer House.

This is the highest number of births recorded in Bristol since 1941, but only a careful statistical analysis would prove to what extent, if any, this increased number of births was due to an increase in the reproduction rate of the population of the City or to what extent it is the result of purely temporary factors, *e.g.*, earlier marriages and previously postponed family building. It should also be remembered that larger numbers have been reaching marriageable age—people born in 1920—1921 when there was a high peak in the birth rate.

For the county as a whole, provisional rates of the Registrar-General show a birth rate 3.0 per thousand population above that of 1945 and the highest recorded since 1923. It is also stated that the effective reproduction rate for the whole of England and Wales corresponding to the births which occurred in 1946 after making allowance for continuing improvement in survivorship conditions is provisionally assessed at 1.102, indicating that the births of 1946 were 10% in excess of those required by a par replacement standard and representing a position not hitherto recorded since 1921.

It is too early in any event to judge the long term event of this change in the birth rate and, as stated above, the present local reproduction factor has not been calculated. The problem of increased social facilities which have been necessary for maternity on account of the greater number of births will now be carried forward as these particular age groups move on to infant welfare, nursery and school provision.

Stillbirths (Rate: 26 per 1,000 total births).

There were 274 (233 in 1945) registered, an increase both in number and in percentage of total births. Fifty-seven were outside city cases compared with 60 in the previous year. There were no stillbirths amongst Bristol children born outside the city boundary. After these adjustments, the stillbirth rate works out at 26 per thousand total births, an increase of one per thousand over the low Bristol record established during the previous year, but still lower than the stillbirth rate for England and Wales, which for 1946 was the lowest ever recorded in this country.

Illegitimacy (Rate: 63 per 1,000 live births).

The upward trend in illegitimacy since the beginning of the war has been broken by a sharp fall in the number and percentage of illegitimate births registered in 1946.

There were 579 (equal to 6.5%) total live births, compared with 711 (nearly 10%) in the previous year.

The number and proportion of outside city cases under this heading has also declined, 129 against 190, equal to 22% compared with 27% for 1945.

Deaths (Rate: 11.75 per 1,000 population).

The total number of civilian deaths, 4,897, exceeds the figure for the preceding year by 92.

Deaths of non-Bristol residents deducted from the total number of civilian deaths recorded in the city numbered 549.

With regard to the compilation of the areal comparability factor, the Registrar-General points out that the variety and magnitude of local population movements and the uneven incidence of civilian war deaths have now combined to frustrate the attempt to secure comparability between local death rates by the use of these factors, and their preparation and issue are being suspended under present conditions. It is not possible, therefore, to compare exactly the local death rate with that for the whole country or with the morbidity of other local areas, but a table giving various rates for several large towns and providing some interesting comparisons with Bristol, has again been included in this report in the statistical appendices, page 104.

Natural Increase (Rate: 7.54 per 1,000 population).

The natural increase in the population of Bristol, that is the excess of births over deaths during the year, was 3,144.

Infant Mortality (Rate: 37 per 1,000 live births).

In the two years previous to 1946, Bristol experienced low records for the infant mortality rate. In 1946, however, there was a slight rise, the rate having risen by two per thousand to 37 per thousand.

During 1946, the total number of infant deaths in the city was 299 (245 during 1945). The increase in the number of infant deaths in 1946 is entirely within the neo-natal age group.

Once again the infant mortality rate amongst illegitimate births is approximately double that amongst legitimate births.

Neo-Natal Deaths (Rate: 23.87 per 1,000 live births).

The Registrar-General's figures for this age group are not available, but local figures indicate that the number of babies lost during the first month of life was 233 (173 in 1945), which is equivalent to 64% of the number of deaths of infants under one year of age. After adjustment for transfers, the figures are respectively 192 for 1946 and 140 for 1945. This is approximately 30 more than might have been expected if last year's record low rate had been maintained. The principal causes of these deaths were premature births 44%, congenital malformations 15%, atalectasis 15%; pneumonia and enteritis also show increases compared with the previous year.

Of the total neo-natal deaths, 82 (43% approx.) occurred in the first ~~year~~ week of life and 77 (40% approx.) on the first day.

Maternal Mortality (Rate: 2.18 per 1,000 total births).

There were 18 maternal deaths in the city during 1945, compared with 17 in the previous year. Only one of the deaths was that of a non-resident, compared with six in 1945. This increase in the Bristol deaths gives a higher maternal mortality rate in the year than since the first year of the war.

II.—GENERAL PROVISION OF THE HEALTH SERVICES.

Department of Preventive Medicine (statistics pages 109-111).

Dr. K. E. Cooper has contributed a report on the work of the Preventive Medicine Laboratories, together with notes on the clinical pathological section by Dr. Dorothy Woodman. This is included in Appendix No. V, page 87.

A brief report by the Public Analyst on the work in his department is also included in Appendix III, page 58.

During the year, the Joint Committee on Medical Appointments considered a report on the staffing and requirements of a Department of Child Health in the University of Bristol, wherein it was recommended that the professor should be given the status of physician to the Children's Hospital and pædiatrician to the Royal Hospital and the city: he should be the senior advisor in pædiatrics to the City of Bristol and the neighbouring local authorities: and he should be responsible for the organisation and co-ordination of the teaching on child health. The Health Committee approved the scheme in principle with the suggestion that the professor of the department be appointed in the first instance and that the details of the establishment of the department be supplied after consultation with him.

Health Centres (statistics pages 112-122).

The number of attendances at Health Centres of children up to five years of age shows a further increase both for those under one year of age and for those between one and five years. The increase was to have been expected having regard to the increased number of births during 1946 compared with the previous year, and to the relatively high birth rate which has been prevailing during the past few years.

The increased number of births during 1946 had a corresponding effect on numbers attending doctors' ante-natal sessions, whilst the number attending midwives' ante-natal sessions also increased, partly on account of the increased number of confinements and partly because bookings for hospital maternity beds had to be restricted to the number of beds available.

My report for last year contained an appendix indicating the Health Committee's scheme for the development of Health Centres services and the necessary steps to be taken for the acquisition of health centre sites was forecast. The earmarking of suitable sites has been proceeding during the year and negotiations have commenced for acquisition in certain instances. In choosing sites, full regard is being paid to the planning proposals of the Planning Staff and Planning Committee. No action is taken in regard to the acquisition of a site until the proposal has passed the Chief Officers' meeting especially inaugurated to consider such proposals and their relationship to the needs of other committees of the Corporation, for example, Education, Housing, Baths, etc. A measure of co-ordination is thus achieved and conflict of interests is avoided.

Dental Workshop.

No progress has been made with the scheme envisaged in my report for 1945 for the establishment of a dental workshop at Southmead Hospital to deal with all cases referred by the Corporation dental officers. This is due entirely to the accommodation problem and the scheme will have to remain in abeyance whilst this difficulty persists.

Hospitals.

General.

There has been no improvement relatively or absolutely in the number of cases awaiting admission to hospital. The shortage of beds due to insufficient accommodation and under staffing both in regard to nursing and domestic staff has prevented any quickening in the turnover and the waiting list of chronic cases at the end of the year is much higher than at the beginning. The sick visitor on the staff of the Medical Officer of Health continues to investigate every case on the waiting list for the purpose of selecting those cases in most urgent need of hospital treatment and arranging for their order of priority in admission.

Negotiations for the purchase of the site for the new Bristol South Hospital and health centre were concluded during the year with the consent of the Ministry of Health. The hospital site will not, however, be transferred automatically to the Regional Hospital Board under the National Health Service Act, since on the appointed day no hospital buildings will stand on the site. In the event of the Regional Hospital Board not requiring this land, it will be available for other purposes of the City Council, for example, schools, whilst approximately two acres of adjoining land have been earmarked for the main divisional health centre for this area and will remain in the possession of the Health Committee for this purpose.

Agreements with other local authorities.

There are already several instances of co-operation with adjacent local authorities whereby certain city services are made available to them. These arrangements have been extended by the Health Committee's approval during the year to agreements whereby smallpox cases from the city of Bath and the city of Gloucester will be admitted to the Health Committee's isolation accommodation at Ham Green Hospital in accordance with terms specified.

Agreements to undertake certain radiological work on behalf of Gloucestershire and Somerset have also been made.

Staff.

Although, as mentioned above, the staffing problem has remained acute, considerable efforts have been made during the year to redress the deficiencies.

In January, Dr. Peters drew attention to the very serious position which had arisen by reason of the shortage of staff at Ham Green Hospital. There were a number of empty beds, both at that hospital and Charterhouse, but no further cases of pneumonia could be admitted unless additional staff could be engaged. As a result of an appeal organised by the Lord Mayor, considerable voluntary assistance was received at Ham Green, thus enabling the reopening of an additional ward of 40 beds. The press and others gave valuable assistance by way of publicity and encouragement to the citizens of the city to offer their services.

Good as was the response to this appeal, its effect was only temporary, and in August it was decided to launch a further recruiting campaign, including broadcast talks in the West Regional programme, advertisements in the press, notices on cinema screens, co-operation with churches and voluntary associations including W.V.S. and Bristol Youth Committee, and to extend the campaign to the areas of adjoining local authorities with whom reception agreements had been entered into.

As a further step to ease the burden upon the nursing staff, the Health Committee authorised an increase in the number of clinic assistants from a present approved strength of 50 to 150.

In August the Ministry of Labour gave notice that they were preparing a scheme for the recruitment of displaced persons from Europe to work on the domestic side in sanatoria and asked whether the Corporation wished to make application for the employment of such persons. The Health Committee signified that they were prepared to take a proportion of the persons required, and on the 24th October, 54 displaced persons from Europe were placed at the disposal of the Committee for work in hospitals. This allocation of labour has been of great assistance in easing the position in connection with domestic staff and, on the whole, the persons accepted have been found good and willing workers.

Joint Preliminary Training School for Nurses.

During the year the Health Committee considered and approved a recommendation that application be made to the General Nursing Council to approve Ham Green Hospital and Sanatorium, Snowdon Road Hospital and Southmead Hospital as one unit for the training of male nurses.

Training of Orderlies.

In May, 1946, the Ministry of Health foreshadowed arrangements to be made whereby the Ministry proposed to make available to men and women released from the Services intensive courses of training to allow them rapidly to qualify for State Registration. Agreement was subsequently reached between the General Nursing Council and the Ministry to a scheme under which eligible candidates who are accepted will be offered a one year's intensive course to cover the preliminary and final examinations for the general part of the State Registration and the part for male nurses. The Ministry had been unable, however, to secure a hostel in Bristol as a special Government Training Centre, and they therefore asked the City Council if they would consider acting as agents of the Ministry, running a centre at its hospitals and arranging the lectures and demonstrations for the course. The full cost of expenses specifically incurred for the scheme, including salaries, etc., for the students would be reimbursed by the Government.

The Health Committee undertook to conduct the training centre and arrangements were approved for the adaptation of two wards at Frenchay Hospital, at present earmarked for long stay cases and which could not be put into use for patients' beds for the time being.

A sister tutor specially appointed will be in charge of the syllabus and the full programme of studies, lectures, demonstrations and practical work arranged in consultation with the hospitals (including Ham Green and Southmead) providing the facilities. It is hoped to complete the necessary adaptation early in the new year, so that the course, in which 50 men will take part, will commence on the 3rd of February, 1947.

Research unit in chronic rheumatism.

A scheme for the treatment of chronic rheumatic disease prepared by Professor Bruce Perry, of Bristol University, and Dr. Kersley, of Bath, was submitted to the Health Committee by the National Health Services Joint Committee. The subcommittee appointed by the National Health Services Joint Committee recommended that the scheme for the establishment of a research unit be approved in principle and that the University be asked to examine the possibilities of financing it. It was further recommended that the constituent authorities should proceed with the establishment of a scheme for clinics for the treatment of rheumatic cases, such clinics to be staffed by approved visiting consultants from the hospitals where diagnostic beds are available. The Health Committee adopted these recommendations of the sub-committee.

Postgraduate Education for Medical Officers.

The scheme referred to in my report for last year has been in operation for a full year and during 1946 the additional residential accommodation at Southmead Hospital for the purpose of officers taking the postgraduate course has been adapted and is now in use.

In addition to the above scheme the Ministry has also inaugurated a scheme whereby some specialists who have served with H.M. Forces and who are experiencing difficulty in securing appointments in civil life are to be assisted to obtain paid employment in which to continue the practice of their specialty. Establishments of general hospitals will be increased by the addition of posts to be made available to ex-service specialists in this category where the volume of specialist work justifies the increase. Proposals for the creation of additional posts at salaries of the order of £1,000 per annum require the approval of the Minister, who will then be prepared to meet the cost of salaries and emoluments of the posts so provided. The Health Committee are participating in this scheme, as opportunity affords.

Southmead Municipal Hospital (statistics page 123).

The medical superintendent, Dr. P. Phillips, reports as follows:—

"During 1946 in this hospital, total admissions and births exceeded 9,000. More operations were performed than ever before (1,713), whilst deaths were fewer.

New developments worthy of mention were as follows:—

(1) P Block was adapted to provide suitable quarters for post graduates and medical students. In this building there are now bedrooms for 22 persons, a common room, a lecture room, a dining room (on cafeteria lines), a writing room, and offices for the Professor of Obstetrics and Gynæcology. This provision liberates about 10 rooms for nurses in Gloucester House, where medical students were formerly accommodated.

(2) Pending the scheme for the utilisation of "O" Ward as a new X-ray department and hospital library, which is not practicable at present, a modern X-ray apparatus has been installed in the old department, replacing a set now obsolete. This is completed and gives added facilities for normal X-rays and for developments in X-ray pelvimetry for obstetrics.

(3) During 1946 replacement of glass in the wards and the removal of protective structures was completed. Theatres and maternity blocks are now back to normal.

(4) Redecoration of five main wards was also carried out. This adds to their spaciousness and general appearance.

(5) The experimental premature baby unit established in one of the maternity wards has been operated to its full capacity. The results fully justify the attempt made and at some future date we look forward to the provision of a specially designed and equipped building.

In the scheme for the post graduate education of medical officers, Southmead Hospital has played a full part, and already a large number of such officers returning from the Services have been accommodated for courses of varying length. At the end of the year sixteen post graduates were still attached here and almost a similar number have completed their courses and been re-established in suitable practices or appointments.

Throughout the year the ten beds set aside for the treatment of bacterial endocarditis by penicillin have been used for cases of this disease arising in the south-western area. The experiment has been fully justified and many cases formerly regarded as incurable and fatal have been restored to full health. This work is still continuing.

The demands on maternity accommodation have been greater than ever before, as shown by the very large number admitted (3,575). Consequently for the present, it seems impossible to release the casualty department attached to the Monk's Park Clinic of the hospital. This still accommodates 22 maternity beds, but the importance of such a casualty department in the Southmead area should not be lost sight of. As soon as alternative maternity beds can be provided, this casualty department should be brought into operation.

The other most urgent needs of the future are:

(a) Extension and re-equipment of the kitchen.
(b) Accommodation for clinical pathology and post mortems.
(c) Central stores.

It seems possible that in spite of present restrictions, these will be undertaken in 1947."

Snowdon Road Hospital. (statistics page 123).

The administration of this hospital remains as an annexe to Southmead Hospital for the treatment of chronic cases with some male tuberculosis and venereal diseases cases. Dr. P. Phillips, medical superintendent, submits the following comments:—

" The number of patients admitted during the year was:—

General, Male and Female	290
Male Tuberculosis	59
Male V.D.	154
Total	503

The removal of the last two categories is contemplated in 1947.

The replacement of glass and removal of protective structures was completed during the year, together with the programme for a limited amount of internal redecoration.

With regard to the further development of the hospital, more comprehensive schemes have been delayed temporarily. In order to ensure that all the chronic cases are reviewed from time to time, a system of consultant visits by physicians and surgeons has been arranged. For the time being, cases requiring operative treatment or X-ray investigation are transferred to Southmead Hospital. Staffing by part-time workers whenever possible has greatly relieved present staffing difficulties and we have also had much assistance from youth organisations, especially at weekends.

The social side of the hospital has also been developed, many entertainments and functions being held to aid such charitable organisations as St. Dunstan's. A pleasing innovation at Christmas time was an official visit by the Sheriff and his Lady."

Mortimer House Maternity Hospital. (statistics page 123).

The nursing and catering management of this hospital is under a matron separately appointed, but the hospital generally is under the direction of the medical superintendent of Southmead Hospital, Dr. P. Phillips, who reports as follows:—

" This maternity section showed an increase of about 140 cases admitted as compared with the previous year. A resumé of the work is as follows:—

Maternity cases admitted	678
Normal deliveries	627
Abnormal deliveries	51

Of the normal cases, 208 required some form of medical assistance.

Number of cases of puerperal fever		—
" " " pyrexia		14
" infants wholly breast fed		530
" " who received supplementary or complementary feeds		140
" cases of ophthalmia neonatorum		—
" maternal deaths		1
Number of stillbirths		6
Causes of stillbirth—		
Macerated fœtus	3	6
Hydrocephalus	1	
Prolapsed cord	1	
White asphyxia	1	
Number of infant deaths under 10 days		7
Causes of death in each case—		
Multiple deformities	1	7
Atelectasis	1	
Prematurity	3	
Spina bifida and meningocele	1	
Erythroblastosis fœtalis	1	

The clinics associated with Mortimer House are serving a very useful purpose in this part of Clifton.

Ham Green Hospital and Sanatorium and Charterhouse Hospital (statistics page 123).

Dr. B. A. I. Peters, medical superintendent, reports as follows:—

"*Infectious Diseases Department.*

The year has been characterised by an extremely low incidence of all infectious diseases, and our total admissions were 1,712 compared with 1,991 last year, a difference of 279. The biggest drop is again in diphtheria. Although 219 were admitted as suspected cases, the diagnosis was confirmed only in 59, this is half last year's very low figure. Of this small number four died, all unprotected persons. The disease is just as virulent as ever amongst the few cases we get and, if the present campaign for immunisation was relaxed, it would soon be as prevalent as in former years.

Scarlet fever admissions were down by 146 compared with last year, 432—all of these recovered.

The admissions of whooping cough were 108, which was about twice last year's figures, of which four died. In spite of all modern treatment this is still a very dangerous disease among very young infants from the many complications.

All forms of primary pneumonias comprised 303 cases, the highest figure ever recorded. Twenty-six of these died—15 of these were aged between 65 and 87, five were between 55 and 65, three between 30 and 55, and three in young infants.

Puerperal fever accounted for 15 admissions, all of which recovered.

Dysentery, which has been troublesome for many years, dropped from 82 confirmed cases to 27, and it gradually seems to be disappearing from amongst the population. All these recovered.

Sixty-seven cases were notified as cerebro spinal fever, but in only 14 of these was the diagnosis confirmed. All these recovered. The remainder were various forms of meningitis and also a considerable variety of neurological conditions.

We admitted nine cases of infantile paralysis, of which one died. This is about an average figure for recent years.

Under other diseases we recorded 333 admissions, the biggest category here was infantile enteritis. Of these, four died, which is a very favourable figure for this still deadly disease in young children. We have been conducting special investigation into this complaint for the last two years, and as a biochemist has now been added to the staff we hope to be able, from this angle of investigation, to throw some further light on the condition. I may point out that amongst the deaths of those under one year, if the congenital defects are taken out, gastro enteritis still accounts for about a quarter of the total deaths of babies in the first year of life.

As is usually the case, out of 60 admissions only two were breast fed babies. If breast feeding could become more popular than it seems to be at the moment, a considerable saving of infant life would ensue, as cow's milk, no matter in what form presented, is a highly unsuitable food for the young infant and no modification can make it really resemble breast milk.

Sanatorium.

The total number of admissions were 261, the number discharged from Ham Green were 262, of whom 43 died.

I am very glad that our chest surgeons are now able to perform a good many operations in the sanatorium for those who need special surgical treatment, so that the waiting list in this department has virtually disappeared. It now seems that the sanatorium patients are at last receiving the best possible medical and surgical treatment available according to the present state of medical knowledge.

It is to be noted that our turnover of sanatorium patients is rather less than it used to be. There are two reasons for this—the first is that since the allowances have been paid to tuberculosis cases, they are now prepared to stay in as long as we think advisable. Formerly a considerable number of patients used to leave the sanatorium before their treatment was completed, due to economic pressure. This is very satisfactory from every point of view, as a half cured tuberculosis case is very likely to relapse. Also the considerable use of surgical treatment has added some months to the time spent in the sanatorium by those patients concerned. This treatment is a great advantage to the patient, but all tends to restrict our turnover.

Charterhouse Hospital (statistics page 123).

Sixty-two cases of tuberculosis in females were admitted during the year, and 17 other convalescent cases from Ham Green. The number of convalescents was very much smaller than in former years owing to the depleted numbers of staff at this annexe.

Since Charterhouse was opened in March, 1941, 394 cases of tuberculosis have been treated there (it has been reserved for early cases) and the results have been very favourable indeed. In addition, during that whole period 959 acute fever cases have been treated there for convalescence from Ham Green, but unfortunately at the time of writing this latter group cannot be dealt with as we have barely enough staff to keep the 50 tuberculosis beds in operation.

General Remarks.

The depressing feature of the past year is the steady draining away of the staff which, of course, is usual, but there have been few recruits to take their places. We had been able, even during the worst of the war years, to take every case whose admission was considered desirable by the notifying doctor.

At the moment we are able to staff only 169 fever beds out of the 300 available at Ham Green and 50 at Charterhouse. This autumn (1946) infectious diseases have been very low, but our busy time is still to come in the next four months. It will mean taking only a small fraction of the primary pneumonia cases usually admitted. In recent years we have had a hundred beds devoted to this disease, and as the measles epidemic now appears to be getting under way, we may find ourselves unable to take a very large number of cases badly in need of hospital treatment.

It is very tragic when we have such powerful weapons to fight the diseases we treat in this type of hospital and every facility for giving the best possible medical and, if necessary, surgical treatment with the aid of my consultant colleagues, that the dearth of nurses should create such a very wide gap in the city's services, as I presume there are no vacancies to take the cases we should be expecting in the next four months.

The Health Committee have, of course, done everything that they possibly could in our campaign of last year to fill this gap, but as far as we were concerned we had hardly any benefit as regards additions to the permanent staff.

The addition to the staff of the 35 displaced persons has been very helpful on the domestic side in the two hospitals, as otherwise that side of the service was verging on collapse.

We have managed to keep the 50 beds going at Charterhouse for tuberculosis cases, but if any of the small number of nurses, who seem practically irreplaceable, leave from there, we shall have to cut down the beds further. This would be a great pity, as a large number of tuberculosis patients have received treatment at Charterhouse during the past six years who would otherwise have had to stay at home, and the high altitude is peculiarly well adapted for the treatment of the earlier cases.

Frenchay Park Hospital (statistics page 123).

My report for 1945 contained a full account of the arrangements whereby the Health Committee became responsible for the management of this hospital as agents for the Ministry of Health.

Dr. W. L. Broadfoot, medical superintendent, reports as follows:—

"*Long-stay Ward.*

At the commencement of 1946 there were 30 female cases in the long-stay ward and nine others were admitted during the year. Unfortunately, however, owing to the acute nursing shortage it was found necessary to transfer 15 of the heavier cases to Southmead and Snowdon Road Hospitals during the summer months, leaving a total of 18. There were four deaths during the year.

Nursery Unit.

During the year 49 children (who are under the care of Dr. A. A. Craig) were admitted to the nursery unit accommodated at this hospital.

Thoracic Unit.

At the request of the Ministry of Health, arrangements were made in March for the transfer of the South West Region Thoracic Unit from Kewstoke Hospital, Weston-super-Mare. Two wards (one male, one female) were opened in April, a second male ward on the 28th June and a male tuberculosis ward on the 2nd September. Owing to the nursing shortage it has not yet been possible to open the urgently needed female tuberculosis ward.

Mr. R. H. R. Belsey, M.S., F.R.C.S., consulting surgeon, South West Region, is in charge of the thoracic unit, assisted by Mr. J. L. Griffiths, F.R.C.S. 993 operations were performed from April to December, 1946. There were 12 deaths. A large proportion of cases are from outside Bristol and special arrangements had to be made for the admission of such cases through the County Medical Officer of Health concerned.

A scheme was adopted during the year whereby student nurses from Frenchay Park Sanatorium spend three months in the thoracic unit in order to gain experience in the nursing of thoracic surgical cases. In the same way, a number of our male ward orderlies have been temporarily transferred to the sanatorium. A few nurses have been loaned from Quantock Sanatorium, Somerset, and Tehidy Sanatorium, Cornwall, for three months, and it is hoped that more hospitals in the region may be able to co-operate in this way in the future.

Military Registrar.

Arrangements were made, at the request of the Ministry of Health, for the transfer of the Military Registrar and his staff from Southmead Hospital and they were accommodated in buildings on the Nissen hut site on the 1st July, 1946.

Maintenance of Hospital and Grounds.

On 2nd June, 1946, the maintenance staff appointed by the Health Committee, with the exception of the charge engineer, were transferred to the Ministry of Works, who assumed responsibility for the upkeep of the hospital premises and grounds.

Future Plans.

The allocation of the various hospital wards was dealt with at a special meeting of the Hospital Sub-Committee and representatives of the Ministry of Health in October, and includes provision for neurological and plastic units, observation tuberculosis, venereal disease, and additional long-stay wards. The Ministry of Health have already agreed to the provision of four tuberculosis observation wards at a cost of £4,600.

It has also been agreed to provide hostel accommodation for 50 ex-Service nursing orderly trainees in two of the wards not needed for patients for 12 months."

Frenchay Park Sanatorium (statistics page 123).

Dr. E. E. Mawson, resident medical officer, reports as follows:—

"During the year 1946 there have been 236 admissions, 228 discharges and seven deaths. The number of bed days was 28,154. The number of cases of surgical tuberculosis is showing the gradual decrease which is occurring in other parts of the country. Of the 25 cases remaining at the end of the year, seven had multiple lesions. Where it is possible to perform a test, as when an abscess is present, this is done, and has shown that in some cases these multiple lesions of joints are due to the human and not the bovine tubercle bacillus.

Co-operation with the thoracic unit has continued during the year, bronchiectatic and asthmatic children going there for bronchograms and physiotherapy, and three have been transferred for lobectomy.

During the year Ward I has been used entirely for young female adults. This reduces the number of beds to 95, the number taken before 1940 when the cubicles in Ward I were used for two cots, so increasing the number to 106. The cubicles are too small for two beds, but as the waiting list for sanatorium beds is greatest in the 16-25 age group this is the most economical use of the space."

Stapleton Institution.

Dr. S. Datta, medical officer, Stapleton Institution, reports as follows: —
"There were 782 patients resident in Stapleton Institution on 31st December, 356 of these being certified under the Lunacy Acts and 136 under the Mental Deficiency Acts. There were 406 cass admitted during the year and there were 177 deaths."

Eastville Institution.

Dr. J. A. L. Roberts, medical officer, Eastville Institution, reports as follows: —
"A total of 353 cases suffering from chronic diseases were admitted to Eastville Institution during the year; 211 were discharged and there were 145 deaths."

Radiological Services (statistics page 117).

Dr. Sparks, in reporting on the work of the radiological services, refers to the fact that the volume of work in all departments, especially in the Central Health Clinic, has continued to increase rapidly. In spite of this, it has been found possible to grant facilities to the adjacent counties of Somerset and Gloucestershire whereby certain cases for whom they are responsible are X-rayed at the Central Health Clinic or Southmead Hospital.

There have been no serious breakdowns during the year. The new department at Frenchay Park Hospital has been opened. At the Central Health Clinic a new developing tank has been installed with thermostatic control.

The conversion of "O" Block at Southmead Hospital to a new X-ray department, referred to in my report for 1945, has not yet been commenced and the latest type of X-ray apparatus has for this reason been temporarily installed in the old department.

An addition at Ham Green Hospital is equipment for tomography which has been installed.

Welfare of the Blind.

Miss R. M. Honeyball, welfare officer for the prevention of blindness, reports that during 1946, 220 visits were paid to the homes of people threatened with blindness. Of these, 48 were new cases, the majority of which were referred by the Bristol Eye Hospital and the remainder by the Royal Blind Asylum.

The provision of transport of patients to the Bristol Eye Hospital for treatment has been a great help and much appreciated by the patients ; especially by the more elderly and physically handicapped. Had transport not been available it would have meant foregoing further treatment as they are quite unable to afford a taxi and many of them have neither friends nor relatives to assist them to hospital.

The Council of Social Service has very kindly co-operated in a number of cases by taking mid-day meals to some of those who are unable to cook a meal for themselves, but unfortunately this does not include patients living in the outlying districts.

In some instances where patients have to enter hospital it has been possible to arrange for home helps and it has been a great relief to know that their families are cared for during their absence.

Some of the cases referred are difficult and need a good deal of supervision, but as a result of the persuasive visits paid many of them now attend regularly for treatment.

The school for partially-sighted school children at Shirehampton is visited at least once a term and the children are seen every six months by Mr. Garden, certifying ophthalmic surgeon at the Central Health Clinic.

The work continues to grow slowly, but it does not yet involve the full-time attention of the welfare officer.

Home Helps (statistics page 124).

Miss Bendall, matron of the external nursing services is responsible under the Medical Officer of Health for this service.

In my report for last year, reference was made to the extension of the home helps scheme operated under the maternity and child welfare powers of the Council, whereby, under Defence Regulation 68 (e) domestic help in a wider range of circumstances might be provided under the Council's arrangements.

During the year the Ministry of Health made further recommendations for the development of the service, particularly as it had been suggested that as many mothers as possible should be encouraged to have their confinement at home, and referred to the Government's decision to set up an International Institute of Houseworkers, which it was hoped would result in opening up a new field of supply of labour for local authorities' home helps and domestic help services.

In Bristol, three panels of home helps have been organised as follows:—

Panel 1, who assist in homes where confinements have taken place.
Panel 2, who assist in homes where there are young children to be cared for.
Panel 3, those who assist in homes where, by reason of sickness or other causes, domestic assistance is needed.

For administrative convenience, the home helps and domestic helps personnel have been interchangeable, separate records being kept for accounting and grant purposes. In accordance with the suggestion of the Ministry of Health, the Health Committee have adopted a recommendation that the separate schemes are run as one and the appointment of a full-time organiser for this work both for organisation and recruitment of staff, has been approved. A total establishment of 80 home helps and domestic helps has been approved, but the labour situation has not permitted more than the equivalent of half this number to be engaged in full or part-time employment and for the time being the appointment of an organiser has been deferred. The detailed administrative duties therefore remain under the direct supervision of the external matron, her deputy, and the supervisor of midwives.

Nurses Acts, 1943 and 1945.

In 1945 licences were issued for the first time under the provisions of Part II of the Nurses Act, 1943, to nurses co-operations operating in the city.

Five applications for renewal of the licences were received in 1946, together with one new application, and the licences were duly granted in accordance with the conditions recommended by the Association of Municipal Corporations.

The Act empowered local authorities to approve a scale of maximum fees to be charged to patients for the services of nursing staff and the maximum amount of commission which should be demanded by the agencies. The Association of Municipal Corporations have now made recommendations in respect of such fees and commissions. These recommendations have been adopted by the Health Committee and have been incorporated in the schedule of conditions under which each licence is issued.

Health Education.

There has again been considerable and increasing interest by the public in health matters. In fact, it has not been possible, owing to the large number of requests, to comply with all applications for talks to Parent Teachers' Associations, youth clubs, adult classes, and other groups, by members of the public health staff.

There is also a continuing demand from many groups for permission to visit various sections of the public health department, either as part of a normal educational curriculum or as the result of their general social interest.

Immunisation against Diphtheria (statistics page 118).

The following notes on the immunisation campaign in Bristol—which, as indicated by the figures relating to incidence of diphtheria given on page 22 has been so successful—are contributed by Mr. L. R. Rogers.

During 1946, over 14,000 children have received immunising injections, 8,000 of these having the full inoculation course of two injections and over 6,000 the single reinforcing injection.

It is estimated that at the end of 1946, of a child population of 25,600 between the ages of one and five years, 60% had been immunised, whilst the percentage immunised amongst 55,300 children of school age, five to fifteen years, was 64%.

These children have been immunised free through the facilities available by way of sessional arrangements and individual immunisations at health centres, infant welfare clinics, nurseries, schools, as well as by general practitioners in the Health Committee's scheme. The days and times of sessions, which cover all parts of the city, are varied to give a wide range of accessibility to intending applicants for immunisation.

Details of the plan of campaign for increased immunisation were described in my report for 1944 and include the following measures. The facilities are made known to the public by continuing propaganda measures: press advertising, bill posting and exhibition of cinema slides and films co-ordinated with the national publicity arranged by the Ministry; by encouragement of teachers, nurses, doctors, chemists, voluntary bodies, the clergy and others to use their influence in support of periodical immunisation campaigns. Factual information on the progress of the campaign is supplied to them to stimulate this body of informed opinion. Information leaflets are sent to the homes of children reaching the age of nine months.

Since the commencement of the campaign it has been a particular responsibility of the health visitor to secure that as far as possible every child in her district is immunised, and the sister-in-charge of each divisional health centre is responsible for reviewing the progress made by the health visitor in each district in the health centre division. A record of immunising injections is kept on the health visitor's case card so that the unimmunised may be followed up periodically until immunisation is secured, and this record is supplemented by a comparative chart of the total immunisation obtained in each division so that the matron of the external nursing services may exercise an overall check on progress.

The standard case record card for immunisation recommended by the Ministry was put into use during the year in place of the existing local card, but this involved little change as the cards were already filed and indexed to provide a follow-up record for those children becoming due for reinforcing injections upon reaching school age.

It has been necessary to vary slightly, in order to comply with the Ministry's requirements, the basis and method of compilation of statistics on immunisation. The necessary adjustments have been made and the statistics are now compiled according to the standard laid down, i.e., age of child at the end of the year in which immunised instead of, as formerly, the age at date of immunisation.

The numbers of children immunised since 1940 are as follows: —

	Full course		Reinforcing injections
	Under 5 yrs.	5—15 yrs.	5—15 yrs.
1940	609	1,876	—
1941	2,333	7,146	—
1942	3,896	6,377	—
1943	4,854	6,430	3,423
1944	4,526	2,270	4,651
1945	5,183	1,867	5,177
1946	4,941	2,899	6,592

Office Accommodation.

The scheme, referred to in my report last year, for adapting premises at the rear of the Central Health Clinic for offices for this department, has not yet been put in hand.

Transport.

In my report last year I referred to the pending establishment of a central transport service under a chief transport officer of the Corporation. The Health Committee's transport and ambulance vehicles, together with staff, were transferred to the Transport and Cleansing Department, under the Transport Officer, on 1st April.

Shops Acts and Young Persons (Employment) Act (statistics page 131).

Mr. C. L. Bryant, chief shops inspector, reports as follows: —

" The present Shops Acts number seven and for convenience may be divided into two sections: —

1. Those dealing with the closing of shops on the weekly half-holiday, in the evenings, and on Sundays.
2. Those sections dealing with the conditions of employment of shop assistants and young persons, i.e., weekly half-holiday, meal and rest intervals, night employment, weekly hours of employment of young persons under 18 years of age seating for female assistants, and compensatory holiday for Sunday employment.

The section dealing with sanitation, heating, lighting, ventilation, etc., is dealt with by the Chief Sanitary Inspector. The Young Persons (Employment) Act, 1938, provides for the control of the working hours, meal and rest intervals, night employment and Sunday employment of young persons employed in certain occupations outside the scope of the Shops or Factory Acts.

Routine Inspections.

During the year, 6,459 visits and 2,550 revisits were made under the Shops Acts, and 136 visits and 19 revisits under the Young Persons (Employment) Act.

Two hundred and sixty-eight verbal warnings were given and 22 warning letters sent, mostly for failure to observe the closing regulations, or failure to keep the prescribed records relating to young persons.

Legal Proceedings.

Legal proceedings were taken in five cases, two for infringement of the closing provisions and three for infringement of the employment provisions. Convictions were obtained and fines imposed in each case.

Evening and Sunday Duty.

Inspectors have carried out observation duty in the evenings and on Sundays as required, but it has not been found necessary to devote so much time to this side of the work as in pre-war days, due to the much earlier closing of shops in general.

The war-time regulation fixing earlier evening closing hours during the winter months has been kept in force by the Government. This regulation fixed a general closing hour at 6 p.m. and 7.30 p.m. on the " late day " (Saturday in most trades).

Government Inquiry.

A Committee of Inquiry appointed by the Government is now engaged in a comprehensive enquiry into the closing hours of shops, health, welfare and safety in places not regulated by the Factories, Mines or Quarries Acts, and the hours of employment of young persons."

Sanitation, Housing, Inspection of Food (statistics pages 125-130).

The report of the Chief Sanitary Inspector, Mr. F. J. Redstone, is contained in the Appendix, page 36.

Port Health.

A report on the work of the Port Health Authority by Dr. D. T. Richards is included in Appendix I, page 128.

The work of the Port Health Department has proceeded smoothly throughout the year, with a 24-hour service at the seaports and airport maintained by the medical and inspectorial staff.

I am indebted to officers of the Port of Bristol Authority, of H.M. Customs and Excise, the Emigration Officer and the Airport Manager for their willing co-operation and assistance.

III.—MATERNITY AND CHILD WELFARE.

Dr. M. G. Hughes, chief assistant for maternity and child welfare, retired during the year and Dr. A. I. Ross, assistant medical officer of health, appointed to succeed her, reports as follows:—

General.

" The outstanding feature of the year was the large increase of births in the city and this had its effect in an extension in the work of many sections of the department—attendances at ante-natal clinics, midwives' sessions, consultants' clinics, infant welfare centres, all showed substantial increases (statistics page 112).

Although there was an increase of 539 in new patients at post-natal clinics, the total patients represented 32% only of the number of new ante-natal patients. The percentage has increased slightly since last year, when it was 29%, but there is considerable room for improvement. Particular attention is to be paid to encouraging mothers to attend these most important clinics.

Special Diagnostic Clinic.

This clinic, set up in December, 1944, for the diagnosis of venereal disease, continued during 1946, when 415 new patients attended. This figure was three less than in 1945, but there was an increase of 190 in the total number of attendances.

Premature Babies.

There were 571 premature babies notified during 1946, an increase of 126 over the previous year. Of 124 born at home (104 being entirely nursed at home), 11 died during the first 24 hours, and a further 10 died within one month. This was a great improvement over 1945, when nearly half the premature babies born at home died within one month. Four hundred and forty-seven were born in hospitals or nursing homes, and of these 32 died within 24 hours and a further 63 within one month.

The report of Dr. Corner and Dr. Hartley on the premature baby unit at Southmead Hospital will be found on page 97 of this report.

Health Visitors.

The home visiting carried out by health visitors increased during the year by 20,553, and reached a total of 101,828.

The scheme, outlined in my report for 1945, for the closer co-ordination of the work of the welfare officer for unmarried mothers with that of health visitors, continued to work well and to produce satisfactory results.

Mother and Baby Home.

It has been agreed that responsibility for maintaining the Mother and Baby Home at Channon's Hill, at present managed by the Social Welfare Committee, shall be transferred to the Health Committee from the end of the current financial year, viz., 31st March, 1947.

Midwives.

When the shortage of staff at Southmead Hospital led to the closing of a number of beds, this resulted in a rise in district midwifery from October onwards. The total of 1,966 cases was an increase of 476 compared with 1945. An indication of the additional work involved for municipal midwives is shown by 70,137 nursing and other visits being paid during the year, an increase over 1945 of 14,062.

Twelve midwives attended the summer school held in Bristol in September.

Four gas and air machines were delivered during the year, and gas and air analgesia was increasingly used.

Nine midwives were trained in the use of the gas and air apparatus.

At the latter end of the year, two houses, one a "pre-fab." in Inns Court, which is occupied, and a house in Ashton, which is being converted into two flats and is not yet occupied, were acquired for the residences of domiciliary midwives.

Three midwives left owing to shortage of accommodation, in September, 1946, and the establishment has only just been made up.

Transport remained a difficulty, especially as the staff were increasingly busy during the last quarter of the year.

Miss I. Gearing, non-medical supervisor of midwives, is in charge of the department of domiciliary midwifery, the establishment of which is 35 midwives. There are two sister tutors for Part II of the midwifery training course.

Care of children apart from their parents.

The most important development during the year in connection with the care of children was the issue of the Curtis Report with its many recommendations for tightening up supervision and for improving the lot of deprived children. The Health Committee, in common with other committees involved, appointed a special sub-committee to deal with the matter.

(1) *The illegitimate child.*

It is considered that in the majority of cases the most satisfactory place for these babies is at home with their mothers. During the year 66% were so cared for. This was a 7% improvement over the previous year. Special health supervision is given to these babies by health visitors, especially during the first few months of life.

The case of the mother who says she cannot or will not take her baby home continues to be the greatest problem, and great care has to be exercised to ensure that the mother does not leave her baby in a nursery and then disappear.

The need for the right type of foster mother is still urgent. Very few new foster mothers were registered during the year and the number of children with foster mothers on the 31st December, 1946, was the lowest for many years.

The following table shows the arrangements made for 417 illegitimate babies who were dealt with by this department during the year:—

(i) Returned home and	
(a) remained with mothers	259
(b) remained with mother's parents	—
(c) fostered	1
(d) adopted	15
(ii) Admitted to residential nurseries and	
(a) still in residence	
Health department nurseries	7
Church of England Children's Society	1
Catholic Rescue Society's nurseries	6
(b) Adopted	3
(iii) (a) Adopted from mother and baby home or hospital	26
(b) Fostered " " "	2
(iv) With mother in situation	7
(v) Removed from city	25
(vi) Deaths, stillbirths and abortions	49
(vii) Child still in hospital	2
(viii) Mother and child still in mother and baby home	14

(2) *Adoptions.*

The work of arranging adoptions was undertaken by the Health Committee when the Adoption of Children (Regulation) Act, 1939, came into operation on the 1st June, 1943, and since that date 199 children have been placed with adopting parents. The demand for girls is still much greater than for boys. There is a long waiting list of prospective adopters who desire to take toddlers and will not consider taking a baby.

Rhesus tests for expectant mothers.

Commencing in October, 1946, arrangements were made, in conjunction with the Regional Blood Transfusion Centre at Southmead Hospital, for a rhesus test to be made on all new patients attending ante-natal clinics. In addition to the test for the Rh factor, a Kahn test is carried out.

Nursing Homes.

During the year registration was effected in respect of five new nursing homes and one certificate was cancelled as the home had closed. The total nursing homes registered numbers 23, with accommodation for 168 maternity patients and 299 others.

Day Nurseries.

Early in the year the Ministry of Health approved the joint recommendations of the Health and Education Committees arising from their Circular 221/45, dealing with nursery provision for children under five, with the result that four day nurseries have been closed, five have been handed over to the Education Committee to run as nursery schools, leaving thirteen nurseries with accommodation for 520 children for which the Health Committee is responsible:—

	No. of Places
Southmead Road	40
The Paragon	25
Wells Road	30
Oakfield Road	35
Roxburgh	40
Dowry Square	25
Coronation Road	50
Ashley Road	50
Granby House	45
Whitehall Road	30
Knowle Park	50
Monks Park Avenue	50
St. Andrew's Road	50
	520

Children displaced from closed nurseries were accommodated at other day nurseries or at nursery schools or classes, on the principle that where possible the Education Committee should be responsible for the children from 2—5 years, and the Health Committee for the children under 2. The day nursery at 91 Ashley Road is the only nursery catering solely for under two's at present, and the acute shortage of school accommodation is likely to delay any immediate extension of this principle.

From April 1st the hours for children's admission to a day nursery were: Monday—Friday, 8.30 a.m.—4.30 p.m., and Saturday, 8.30 a.m.—12.30 p.m. On health grounds the practice of taking children from their homes in the early hours of the morning and placing them in nurseries is to be deprecated. During the war a child was eligible for admission if the mother was on essential war work. Today the criteria includes the children of war widows, unmarried mothers, mothers who are ill, either at home or in hospital and mothers engaged in essential industry. The original charge of 1/- per day per child has not been increased.

With the exception of the nursery at Avonmouth, the places at all nurseries have been well occupied, and only on a few occasions have they been without waiting lists of children requiring admission. During the year, 664 children have been discharged and 694 new children admitted. Approximately 1,200 children have been cared for in the 520 places which our day nurseries offer.

Residential Nurseries.

The demand for residential nursery accommodation has continued to exceed the number of beds available, so that admissions have, in the main, been restricted to emergencies. About 90% of the children in residence are long term cases, leaving a comparatively small margin for children who need admission for short periods.

The admissions to these nurseries during 1946 may be classified as follows: —

Illegitimate children	21
Children awaiting adoption	2
Mothers going into hospital for tuberculosis or other illness	80
Mother's confinement	189
Social Welfare cases	67
Cases of debility and other medical reasons ...	14
	373

Residential nursery accommodation at present consists of the following establishments, the number of beds available being shown against each: —

Downend Babies' Home	55
Frenchay Lodge	28
Frenchay House	20
Frenchay Park	50
Nore House, Portishead	30

Frenchay House and Frenchay Lodge, which had been requisitioned during the war, became due for derequisitioning this year, but the properties have been retained for their present use by purchase from the owners.

Babies' Home, Downend. (statistics page 124).

Dr. Greta Hartley, who is responsible for the medical supervision of the Babies' Home, Downend, reports as follows: —

" During 1946 admissions to the Babies' Home again showed a slight increase on 1945 to 145, and was the largest number ever admitted during a year, as many more ' short stay ' cases were accommodated.

Great difficulty has been experienced during the year owing to severe shortage of senior trained nursing staff, so that in spite of great pressure on accommodation, admissions have had to be limited to the most urgent applications, and from time to time admissions were temporarily stopped owing to the staff shortage which became progressivelly worse during the year.

The general health of the children has been satisfactory. Five children were transferred to Southmead Hospital, three with bronchitis and two for investigation, and all made good recoveries. No epidemics of infectious disease occurred. One child had mumps.

The new training scheme for nursery nurses commenced during the year and the absence of the pupils for two days' educational training each week has caused a great staffing problem, while the constant changes of nurses which is thus caused is most unsatisfactory both for the care of the children and the proper practical training of the nurses. Three nurses entered for the last examination held by the National Society of Children's Nurseries in May, 1946, and all were successful. Four nurses entered for and obtained the new National Nursery Certificate in October, 1946."

Frenchay Lodge, Frenchay House, Frenchay Park, and Nore House (Portishead) Nurseries (statistics page 124).

Dr. Alison Craig, who is responsible for the medical supervision of the above nurseries, reports as follows:—

"The new admissions to these nurseries have shown a decrease on 1945, owing to the increasing number of children requiring a long-stay and an insufficiency of accommodation for short-stay children.

There is a great need for improved means of isolation and for better educational supervision and training for the 2—5-year-olds in the Frenchay nurseries, but with the insecurity of tenure of these houses it had not been possible for necessary structural alterations and improvements to be carried out.

Apart from an outbreak of 16 cases of whooping cough at Frenchay Lodge in September, the general health of the children has been good. Delicate and undernourished children have been transferred to Nore House, Portishead, where they have made good progress."

Unmarried Mothers' Welfare.

The welfare officer, Mrs. Stott, reports as follows:—

"The year 1946 has shown a decrease in the number of applications received in respect of the births of illegitimate children.

A number of the applicants have been young married women, who have had little or no opportunity of living with their husbands, and who have had no chance of making a home together. In many instances it has been known that divorce proceedings would be instituted as soon as possible. These cases are amongst the most difficult to deal with.

During the year 1946, 455 applications from unmarried expectant mothers or in respect of an illegitimate child were received. Of these—

354	were in respect of a	1st	illegitimate child
81	,, ,,	2nd	,,
17	,, ,,	3rd	,,
3	,, ,,	4th	,,

At the end of 1945 there were 92 cases outstanding where the child had not been born, making a total of 547 cases to be assisted. Arrangements were made as follows:—

Admitted to hospital	319
Admitted to hospital immediately after birth of child ...	12
Born at mother and baby home	9
Midwife attended	42
Assistance in confinement not sought	57
Applications withdrawn	14
Child not yet born	94

A high percentage of young mothers have expressed their determination to keep their children, and in many instances they have been supported in this decision by their parents or relatives, and it is encouraging to note that 62% of the babies dealt with during the year were with their mothers in their natural home environment at the end of the year.

There are always, however, a number of young mothers who have no refuge in their own homes, and not a few who are virtually homeless. For these a stay in a suitable home has proved of great help. Of 124 girls admitted to homes during the year, 59 went to our own mother and baby home at 11 Snowdon Road.

A great difficulty still exists in providing suitable accommodation in many of these cases when the time comes for discharge from a mother and baby home. This normally occurs when the baby is three to four months old, and often the young mother is faced then with the necessity of separation from her child and her inability to find a suitable home for baby. The need of a hostel for mothers and babies is evident in such cases, and the lack of it causes an interruption in the welfare work which it is hoped commences when an expectant mother first asks for assistance.

Even when parents are anxious to help a daughter who has become the mother of an illegitimate child, often the lack of accommodation makes a place for mother and child in that home an impossibility. It is in these cases one is able to see how easily a girl can drift. Few people will open their doors to a mother and baby, and in consequence unsatisfactory lodgings or rooms are obtained.

The individual girls are appreciative of the assistance given in affiliation work, and the continued help in obtaining payments due under orders and agreements.

The following is an analysis of the affiliation work in respect of the 455 fresh applications in 1946, to which must be added 278 cases incomplete on 31st December, 1945—a total of 733 cases.

Affiliation orders obtained	38
Applications for affiliation orders dismissed	2
Agreements	83
Information laid	7
Payments direct to girl	5
Child adopted	37
Married woman (not entitled to summons)	1
Returned to live with husband	13
Married to putative father	25
Co-habiting	36
Married to another man	6
Putative father died	3
Putative father not traced	13
Putative father not known	25
Putative father returned to U.S.A.	36
Abortion, stillbirth, or child died	46
No corroboration	29
Left area	21
Applications withdrawn	8
Refused to take action	6
No action possible (girl certified mental defective)	2
Payment under order enforced	1
Mother died	1
Incomplete at end of year	289
	733

Help was given in 120 cases for arrears.

The sum of £11, 082 was received and disbursed as follows:—

£9,808	received and paid to or on behalf of the individual concerned.
982	received towards maternity costs or maintenance of a child at a nursery.
292	repaid to the Social Welfare Committee.
£11,082	

More applications from women with matrimonial problems have been dealt with during the year.

The first contact is usually when a confidence of unhappiness or some grave disturbance in the home is given at a clinic. The effect of broken homes on the lives of little children is so great that no effort should be spared in bringing about a satisfactory adjustment in all such cases.

In 14 cases maintenance orders, and in 7 cases orders under the Guardianship of Infants Act have been obtained.

In 5 cases reconciliation was effected.

In a number of cases assistance was given in an application for increase in an existing order, and for arrears."

Sterility Clinic.

Dr. Irving-Bell reports: " It is generally accepted now that when investigating the causes of childlessness in marriage, the fertility of the husband should be assessed before any detailed examination of the wife is carried out.

During 1946, men were directed to this clinic for this investigation from different organisations in the following proportions: —

Referred by medical officers of female sterility and post-natal clinics	57%
,, ,, general practitioners	22%
,, ,, marriage guidance centre (voluntary organisation)	9%
,, .. self (patient's own request))	9%
,, ,, probation officers (courts)	3%
Total number of new cases	112
Total attendances	211

Number of men found to be sterile or infertile was 63% of those tested.

Approximate percentage of wives becoming pregnant following advice and treatment (up to end of September) was 40%.

Apart from examinations for suspected infertility, 10% of the above total of new cases were referred for conditions other than infertility, such as sexual impotence and other functional disabilities. In addition, an increasing number of men made appointments for examination and tests before marriage. These premarital examinations can prevent a large number of physical maladjustments developing in marriage and thus reduce the divorce rate considerably.

During 1945, the clinic functioned on only one session in the week. In January, 1946, the Health Committee authorised another session (a morning one), making two each week. With only two sessions weekly, very little time can be given to the re-examinations and treatment of old patients, and it would seem inevitable that a further increase in the number of sessions will be required if this clinic is to provide an adequate service.

The examination of the male consists of a full clinical examination with anthropomorphic assessment and a semen analysis. Special containers are provided for the collection of semen and these are identified by the patient's number only, so that no name or address is recorded except on the clinic card which remains in the possession of the medical officer conducting the investigation. Semen specimens are analysed by the laboratory staff of the Department of Preventive Medicine at Canynge Hall. A summary of the complete investigation is recorded on a special form for the information of the medical officer of the female sterility clinic, and this form is used also when reporting to medical practitioners who have referred patients for investigation.

Treatment.—Apart from routine advice and instruction in marital technique to increase the chances of conception in the wife, treatment for the infertile husband is successful in the majority of cases by the administration of small doses of methyl testosterone which improves spermatogenesis: this finding is contrary to the generally accepted opinion. Methyl testosterone is administered orally, thus avoiding repeated visits to the clinic for injections, etc.

Conclusions.—There is no doubt that this work demands a properly constituted clinic sufficiently comprehensive to provide facilities for the above investigations and for the growing demand and importance of premarital examinations. The report of a scheme for such an expansion of the present service was submitted to the medical official of health towards the end of 1946."

Tutorial Section.

Miss W. G. Gibb, sister tutor, who is in charge of the tutorial section, with accommodation at 36 Queen Square, reports as follows: —

" The main activities of the section are in connection with the health visitors' training course and the nursery nurses' training scheme.

(1) *Health Visitors' Training Course.*

This course is run in conjunction with the University of Bristol and extends over a period of six months (September to March). It consists of 90 lectures in the autumn term, and 23 in the spring term, together with 46 tutorials and 40 observation visits. It is an intensive course and requires careful organisation. In addition to the pupils appointed by the Health Committee, the Gloucestershire County Council appoint a number for the course. The latter take all their practical training in the county area. Nineteen pupils took the course, which ended in March, 1946, and of these 13 were successful in passing the examination of the Royal Sanitary Institute. There are 20 pupils taking the present course, of which number six are from Gloucestershire.

(2) *Nursery Students.*

Early in 1946 the Ministries of Health and Education issued a circular giving details of a National Training Scheme for Nursery Students with examinations arranged by the Royal Sanitary Institute, which would take the place of the course and examination previously arranged by the National Society of Children's Nurseries. One big change was the fact that although practical training had to be continued there was no examination in this side of the work. The first course, of two years' duration, with the new syllabus, was commenced on 3rd September, 1946, in conjunction with the Education Committee. There are 105 health and education students attending, including 30 who had commenced training under the old scheme and would be eligible to take the new examination in March and September, 1947. Lectures are held at Brandon Cottage, Brandon Steep, and to avoid long travel and loss of time the committees have agreed to pay luncheon expenses in respect of all students attending from residential and day nurseries. The work involved has increased, but there is a decided improvement in the self-reliance of the students, probably due to the further education included in the syllabus. All the students who completed the old course in 1946 were successful in passing the National Society of Children's Nurseries examination held in May last."

IV.—PREVALENCE AND CONTROL OF INFECTIOUS AND OTHER DISEASE.

Diphtheria.

For the third year in succession, the number of cases of diphtheria occurring in Bristol has been halved, only 38 being notified in 1946. More than half of these cases occurred in the last quarter of the year, seven being contacts from a single source of infection. Excluding one case not belonging to Bristol, there were three diphtheria deaths in 1946. None of these cases was immunised.

These figures may be taken

(1) as evidence of the success of the immunising campaign; and
(2) of the need for continued measures towards 100% immunised child population if the disease is to be eliminated from Bristol.

An account of the immunisation campaign will be found on page 13.

Cerebro-Spinal Meningitis.

Twenty-eight cases were notified in 1946—13 in 1945.

The number of deaths recorded three, being one more than for the previous year.

Scarlet Fever.

There has been a fall in the number of cases notified—567 (697 in 1945). For the first time since records have been kept—in 1881 there were 153 attributed to scarlet fever—there has been no death from this cause during the year in Bristol.

Whooping Cough.

Whooping cough has been more prevalent again this year, with 705 cases notified against 497 for the previous year. Most of the cases occurred in the first half of the year, however, and the last quarter has been relatively free from this infection. Although the number of cases shows an increase, the number of deaths for the year, four, is the same as for the previous year.

Tuberculosis.

A total of 598 cases of pulmonary tuberculosis have come to the notice of the department during 1946 by notification or otherwise. This compares with 545 for the previous year. The number of deaths recorded, 236, is approximately the same as during 1945.

Cases of non-pulmonary tuberculosis totalled 93 during 1946, 12 more than last year's low record, but still less than for 1944, which was up to that time a year of low record.

Deaths from this cause numbered 30. This is a low record, the previous best figure being 31 in 1944.

Measles.

There was relatively little measles in 1946, but an increase in the number of cases towards the end of the year gives a total of 303. No deaths were attributed to this cause.

Dysentery.

Only 14 cases have been notified during the second half of 1946, compared with 100 in the first half, to make a total of 114 cases for the year against 386 for 1945.

The campaign for the cleaner handling of food inaugurated in January continued during the year.

Erysipelas.

Eighty-two cases were notified in 1946. This is 34 less than the previous lowest figure, 116 in 1943.

Respiratory Diseases, other than Tuberculosis.

Acute primary pneumonia, bronchiectasis and influenza show some increase compared with the previous year, both as regards the number of cases and deaths due partly to the influenza epidemic at the beginning of the yeaar.

Tuberculosis (statistics page 106).

Dr. C. J. Campbell Faill, senior chest physician, reports as follows:—

" The work of the chest section continues practically unaltered, but if the recorded deaths in 1946 are any criterion, it would appear that we have reached the peak of our wartime increase in the incidence of tuberculosis. In 1938 there were 231 deaths from pulmonary tuberculosis and 40 from non-pulmonary; in 1945 the figures were pulmonary 246, non-pulmonary 55; and in 1946, pulmonary 240 and non-pulmonary 40. When one considers the reduction of animal protein and fat to which the population has been subjected for the last seven years, this is remarkable and makes the future outlook even more hopeful. Another very gratifying point is the continued slight fall in the number of deaths from tuberculosis among young adults (15—25 years).

In 1935 it was—pulmonary 45, non-pulmonary 13.
In 1945 „ —pulmonary 37, non-pulmonary 11.
In 1946 „ —pulmonary 35, non-pulmonary 5.

The number of new cases seen shows a corresponding slight drop—from 2,684 in 1945 to 2,593 in 1946. We have, however, been able to give rather more individual attention to the definite cases as the increase in the number of re-examinations shows—from 9,178 in 1945 to 10,432 in 1946.

The number of attendances for the refilling of artificial pneumothorax has again increased:—1938, 653; 1945, 2,350; 1946, 3,086."

Financial Assistance (statistics page 119).

The tuberculosis welfare officer is Mr. C. L. Bryant, who reports that under the Government scheme of financial assistance for cases of pulmonary tuberculosis undergoing treatment recommended by the tuberculosis officer, 413 applications were received and of these 364 were granted.

The average weekly disbursements were: —

Maintenance allowances	£316
Discretionary allowances	£15
Special payments	£9
Maintenance allowances (Social Welfare Scales) ...	£79

The last item refers to allowances paid under an arrangement whereby patients ineligible for allowances under the Government scheme are paid allowances on behalf of the Social Welfare Committee.

In accordance with directions from the Ministry of Health, payments made under the Family Allowances Act which came into force on 6th August, 1946, have to be taken into account where a tuberculosis allowance is payable, thus reducing the allowance. The effect has been to some extent offset by the Government's increasing the children's allowances under the Tuberculosis Scheme as from December, 1946.

Extra Nourishment.

Extra nourishment by way of two pints of free milk per day is granted, subject to an income limit, to patients suffering from tuberculosis.

During the year 182 patients qualified for this grant and the average daily number of patients in receipt of free milk was 153.

Rehabilitation.

Forty patients were referred to the Ministry of Labour for training or suitable employment; 21 were found whole-time work, three part-time, and five commenced work at training centres.

After-care work.

The Care Committee has again assisted patients in various ways such as small cash allowances and grants for bedding, footwear and clothing, a total of 204 patients or dependents being assisted in this way during the year.

Thanks are due to the Women's Voluntary Services for most useful gifts of footwear and clothing for issue to necessitous patients.

During the year the Committee rented suitable premises and established classes of occupational therapy for selected cases and this has proved to be of great value to patients who are unfit to return to normal employment but are capable of some light occupation. Three sessions are held each week and the average attendance at each session is 10. Instruction is given in leatherwork, slipper and glove making, embroidery, rug and soft toy making.

Thoracic Unit.

With the transfer of the thoracic department from Kewstoke Hospital to Frenchay General Hospital, Bristol cases are now admitted to the latter hospital. Mr. Belsey, consulting thoracic surgeon, south-west region, has remained in charge of the unit and his services have continued to be available to the Health Committee at Ham Green Hospital, Frenchay Park Sanatorium, Southmead Hospital, and at the Central Health Clinic. As recorded in the report of the medical superintendent of Ham Green Hospital, arrears of work in that hospital have been reduced to a minimum.

Mass Miniature Radiography. (statistics page 120).

Dr. E. E. Mawson, director of the mass miniature radiography unit, reports as follows: —

"During 1946, 31,672 persons were examined by mass miniature radiography.

	Male	Female	Total
Bristol	9,185	7,884	17,069
Bath (2 surveys)	2,362	2,495	4,857
Somerset.			
Street, Yeovil, Taunton	2,882	1,932	4,814
Wiltshire.			
Swindon (twice), Calne, Hullavington, Malmesbury ...	3,203	1,729	4,932

We hope in future to be able to achieve greater numbers because we are expecting at an early date the new van supplied by the Ministry of Health. This supplies generation of electric current, dark room facilities, and easy and safe transport of machinery. At present we are compelled to spend so much time in moving our plant and dark room equipment, that it is an uneconomical proposition to visit small factories of, say, one to two hundred employees. As the south-west is not a highly industrial area, but contains a large number of small factories, it is essential to have easy transport if the service is to be fairly available to everyone.

There is no doubt that an increasingly large number of people are taking advantage of the opportunity of a yearly examination, and we have annual bookings at several factories and institutions. Our programme is completely filled until the end of February, 1948.

In the last annual report an analysis of the year's findings was made. This year an analysis of the occupations of the persons x-rayed will probably be of greater interest than a repetition of figures. Although the numbers examined are not sufficient for generalisations to be made about the incidence of disease in various trades, when they are added to the numbers obtained from all other units by the Ministry of Health useful information is obtained. There are already indications that light may be thrown on the problem of new growths in the chest.

Occupation	Numbers examined		
	Male	Female	Total
School leavers	1,863	1,955	3,818
Agricultural workers	163	15	178
Miners and quarrymen	16	1	17
Workers in non-metalliferous mines	6	—	6
Makers of bricks, pottery, glass	21	1	22
Workers in chemical processes	578	36	614
Metal workers (non-precious metals)	2,634	400	3,034
Metal workers (precious metals)	14	5	19
Electricians and workers in electrical appliances ...	732	373	1,105
Makers of watches, clocks and scientific instruments	8	1	9
Workers in skins and leather	140	41	181
Textile workers, rag, wool, spinners	44	10	54
Textile workers, dress, boots, shoes, etc.	366	582	953
Tobacco workers	1,159	2,592	3,751
Workers in wood, furniture, upholsterers	501	40	541
Workers in paper, cardboard, bookbinders	58	273	331
Printers, photographers	210	46	256
Builders and bricklayers	179	11	190
Painters and decorators	218	28	246
Workers in rubber, vulcanisers, moulders	65	50	115
Makers of musical, ships' and surgical instruments	37	2	39
Transport workers, rail, road and water	915	365	1,280
Commercial, salesmen, shop assistants	338	358	696
Civil servants, police	278	24	302
Professional occupations, teachers, doctors, etc. ...	1,239	1,422	2,661
Entertainments, actors, musicians	17	7	24
Personal service, domestic, hairdressers	201	595	796
Clerks, draughtsmen, typists, secretaries	1,825	2,212	4,037
Storekeepers, Packers, labellers	575	227	802
Stationary engine drivers, boiler firemen, gas producer men	184	—	184
Time keepers, general labourers, watchmen, fire brigade men, housewives and a small number of children under 12	1,958	1,293	3,251
Inmates and staff, Hortham Colony	450	371	821
Inmates and staff, Fishponds Mental Hospital ...	640	699	1,339
	17,632	14,040	31,672

Our aim when visiting a factory is to x-ray as many people as possible without slowing production. We have been assured in several factories that we have secured this aim. A liaison officer appointed by the factory " feeds " the unit with examinees, sending eight to ten examinees every five minutes. Being a member of the factory staff he knows from where they can most easily be spared. Unless there is a long distance for the examinee to walk to the unit, he is absent from his work not more than ten minutes. The results of the examination are confidential, and no reports are sent or given to anyone but the examinee.

Early in June, 1947, and in November, 1947, an opportunity for x-ray will be given to the general public of Bristol at convenient centres.

Up to December, 1946, the numbers examined since the scheme commenced were 74,406."

Cancer Scheme—Bristol Region. (statistics page 123).

The following notes are supplied by Mr. C. C. Hancock, deputy administrative assistant:—

" The scheme under the Cancer Act, 1937, covers the areas of Somerset, Gloucestershire, Wiltshire, and the county boroughs of Bristol and Bath, the population involved approaching the 2,000,000 mark.

The radium centre and radiotherapy department is established at the Bristol Royal Hospital (General Hospital branch), and specialist radiologists, under a director, operate the service at the centre. The appointments made by the Royal Hospital Board were approved by the constituent authorities and the University.

An Advisory Committee of the local authorities has been set up with the Clerk of the Gloucestershire County Council as secretary.

Medical Adviser.

Fortunately for the scheme, the services of Professor Rendle Short became available as the result of his retirement from the Chair of Surgery at the University. The local authorities concerned have appointed him their medical adviser for the purpose of this scheme. Professor Rendle Short supervises the operation of the cancer scheme throughout the areas represented by the Advisory Committee, utilising, as may be required, the existing administrative machinery of each health department. For the purpose of co-ordination, he has an office at the radiological department where the cancer bureau is located. The responsibility for keeping records of cases belongs to the hospital approved for carrying out treatment; certain information must also be transmitted to the cancer bureau and the local health authorities.

The medical adviser attends all meetings and reports to the Advisory Committee on all matters of joint responsibility. On request he also attends the local public health committees and reports on matters of particular local responsibility. He also acts as liaison officer between the clinical staffs of the various hospitals and the medical officers of health of the various authorities. This helps to maintain a high standard of efficiency in the treatment of cases.

Radiotherapeutic Sub-Centres.

Consultative clinics are being set up together with radiotherapeutic sub-centres. These arrangements are made by the county health authorities in consultation with the governors of the hospitals approved for treatment in their respective areas. The radiotherapeutic sub-centres are closely linked up with the main centre of the cancer organisation at the Bristol Royal Hospital. They are staffed by the experienced radiotherapists from the Royal Hospital, consultations being held at the sub-centres. The cost of these services is refunded to the Bristol Royal Hospital.

The mutual advantages of this arrangement, and the general liaison of the medical adviser, should ensure that all the points outlined by the Minister of Health in connection with the establishment of a joint sub-centre in the Gloucester area are duly observed.

Development of Local Arrangements.

As regards treatment of Bristol patients, there has been no material change from the previous report, with the exception of the fact that all thoracic cases are now sent to Frenchay Hospital. The chest unit at Kewstoke Emergency Hospital was transferred to Frenchay in April, 1947.

In addition, Cossham Memorial Hospital has been approved by the Ministry of Health as being a hospital within the cancer scheme.

There were 39 applications from out-patients for assistance towards the cost of transport in attending at the radiotherapeutic centre for treatment, the total amount granted being £77.

The University considered the respective responsibilities of the different Committees concerned with the treatment of cancer patients, and outlined the following suggestions which have been accepted by all constituent bodies: —

(1) The primary function of the Cancer Advisory Committee, under the chairmanship of Alderman Barrett, shall be to make recommendations in regard to all services for which the adjacent local authorities (Bath, Gloucester, Somerset, Wiltshire, Gloucestershire) are responsible under the Cancer Act.

(a) Agreements with the Bristol General Hospital radiotherapy department to provide services;

(b) Agreements with all hospitals in the area at which services are to be rendered. The advice of the Medical Advisory Committee may be sought when professional competence of any hospital in the area is in question;

(c) Appointment and supervision of the work of the surgical adviser. Fresh appointments to be subject to the approval of the Medical Advisory Committee.

(The head of the radiotherapy department is appointed by the Bristol Hospital Board, the municipality of Bristol, and the University, jointly).

(2) The primary function of the Radiological and Cancer Act Committee, under the chairmanship of Mr. Burris, shall be to consider and authorise services to be rendered by the radiotherapy and radio-diagnosis department of the Bristol Royal Hospital. This shall include: —

(a) Provision of technical staff.
(b) Apparatus.
(c) Rooms.
(d) Hospital beds.
(e) Keeping of records.
(f) They may also, on request, advise with regard to the provision of radiotherapy in the area outside Bristol.

(g) They shall arrange, as far as possible, for an adequate number of beds to be provided in Bristol for the surgical treatment of cancer, and for the care of hopeless and inoperable cases; also for equipment and nursing services.

(3) The primary function of the Medical Advisory Committee, under the chairmanship of Professor Tyndall, shall be to give advice on clinical matters. This shall include: —

(a) The diagnosis and treatment of cancer and the suggestion of regulations for ensuring for each patient the opinion both of a surgeon or specialist and of a radiotherapist, except in certain classes of cases where such consultation may be judged unnecessary.

(b) The giving of advice on questions of professional competence, whether of hospitals or of individuals.

(c) The giving of advice as to the segregation of certain types of cancer throughout the area for treatment at a particular hospital and by a specialist team."

Appendix I.

PORT HEALTH SERVICES

Medical Inspection and Sanitary Circumstances

By Dr. D. T. RICHARDS, Chief Assistant Port Medical Officer.

This Report is prepared. as in pre-war years, on the lines indicated in a memorandum issued by the Ministry of Health to Port Health Authorities (Memo. 302/S.A.).

The following narrative is referenced where appropriate to statistical tables in Appendix IX, pages 132-136.

General.

The duties of a Port Health Authority include (i) the prevention of the importation of infectious disease, and (ii) the prevention of the importation of rat plague.

To maintain adequate security in these respects each Port Health Authority has its separate problem. Local conditions, which may be tidal or geographical, govern the procedure of boarding and clearing vessels. Thus, in many of the large river ports, vessels from " foreign " can be reached by launch and inspected at convenient anchorages along the river, a measure of quarantine being thus secured in all cases before a vessel is cleared and allowed to proceed to berth. In Bristol the procedure is different. At the nearest anchorages, in Barry Roads or at Walton Bay, routine boarding is impracticable, and we are confronted with the problem that vessels from infected ports enter the City boundary, or sometimes steam up into the heart of the City, before an inspection can be completed.

The boarding of Avonmouth arrivals is carried out at the Royal Edward locks. Vessels bound for Bristol and Portishead docks are boarded at Cumberland Basin and the Portishead lock entrance respectively. Theoretically, therefore, the most effective barrier to ship-borne infection—an expanse of water—is lost before inspection can be commenced, and for this reason the security measures adopted in Bristol must necessarily be stricter than at other ports. A rigid system of " ship-shore " isolation must continue to be imposed from the exact time of arrival of every vessel from " foreign " into one of the Bristol locks, and this must be maintained until the time that clearance can be established.

The Port of Bristol comprises the Royal Edward and Avonmouth docks, the City docks and the Portishead docks which together have a water acreage of 195, and a quayside of 39,390 feet. An extension to the Royal Edward dock was completed during the war. The volume of trade in food shipments for 1946 compares favourably with that for 1945, and in this respect Bristol has been more fortunate than other Bristol Channel ports. Avonmouth is one of the principal food importing docks in the United Kingdom; the chief imports during the year being grain, bananas and other fruit, refrigerated produce, petroleum and tobacco.

The Port Health Amendment Regulations (1945), which have arisen from the International Sanitary Convention (1944), have been in operation throughout the year.

Vessels Entering the Port during the year (see Table, page 132).

At the Bristol City docks the number of foreign-going arrivals has increased, chiefly due to the resumption of the Baltic trade. This has been countered by a reduction—chiefly in respect of oil tankers—in the number of foreign-going arrivals at the Avonmouth docks.

During the year 565 foreign-going merchant vessels entered the port. All were inspected on arrival, and subjected to the established precautionary measures during their stay. A large number of these vessels arrived from infected areas. Forty-four were from plague infected ports.

The port medical officers dealt with 22,710 crew and passengers, of whom 772 were referred to clinic, hospital or to Federation doctor for treatment or observation.

No dangerous infection was dealt with, but this in no way lessens the need for careful inspection and surveillance—both of which are essential preliminaries to the rapid and satisfactorv control of ship-borne disease.

Foreign Ports from which vessels arrive.

Europe.

North.—Amsterdam, Antwerp, Burea, Delfzyl, Gdynia, Gefle, Ghent, Gothenburg, Granville, Hamburg, Helsingfors, Hernosand, Kaleningrad, Karlmar, Karlochan, Karlsborg, Kotka, Lubeck, Oskarshamn, Oslo, Pitea, Rotterdam, Stettin, Stockholm, Sundsvall, Terneuzen, Trondheim, Vifstavarv.

South.—Barcelona, Bordeaux, Brest, Cadiz, Cartagena, Catania, Cherbourg, Genoa, Gibraltar, Le Havre, Lisbon, Marseilles, Malta, Nantes, Naples, Oporto, Piraeus, Rouen, Santander, Seville, Spezia, Tounay Charente, Trieste, Valencia.

Africa.

Accra, Alexandria, Algiers, Bathurst, Beira, Casablanca, Capetown, Dakar, Durban, Freetown, Lagos, Mombassa, Oran, Port Elizabeth, Port Said, Port Sudan, Sfax, Sierra Leone, Suez, Takoradi, Tiko, Winneba. Islands: Cape Verde, Canary, and Mauritius.

Asia.

Abadan, Basra, Bombay, Bahrein, Bangkok, Calcutta, Chittagong, Cochin, Haifa, Izmir, Jaffa, Karachi, Madras, Marmagao, Ormuz, Penang, Port Swettenham, Rangoon, Saigon, Singapore, Shanghai, Vizagapatam.

America.

North (Canada).—Fort Churchill, Halifax, Montreal, Parrsboro, Quebec, Sorel, Sydney-C.B., St. John-N.B., Three Rivers, Vancouver.

Newfoundland.—Botwood, St. John's, Wabana.

U.S.A.—Baltimore, BatonRouge, Baytown, Boston, Charleston, Corpus Christi, Galveston, Houston, Mobile, New York, Newport News, Norfolk, Norco, New Orleans, Philadelphia, Portland Maine, Portland Oregan, Port Arthur, San Francisco, San Pedro, Savannah, Sabine, Texas City, Wilmington.

Central.—Antigua, Aruba, Barbados, Carapito, Cuba, Curacao, Demerara, Kingston, Maracaibo, Panama, St. Kitts, Trinidad.

South.—Bahia Blanca, Buenos Aires, La Plata, Montevideo, Patagonia, Punta Arenas, Rio de Janeiro, Rosario, Santos.

Australia.

Adelaide, Albany, Brisbane, Cairns, Freemantle, Geelong, Melbourne, Newcastle, Port Pirie, Rockhampton, Sydney.

New Zealand.

Auckland, Bluff, Christchurch, Dunedin, Napier, New Plymouth, Wellington.

III.—Water Supply.

(1) *Source of supply for:—*

(*a*) *The Port.*

Water, supplied by the Bristol Waterworks Company, is available to all premises in the dock area.

(*b*) *Shipping.*

Fresh water mains, carrying the Bristol Waterworks supply, are laid on to the quayside berths.

(2) *Hydrants and hosepipes. What precautions are taken against contamination?*

Standpipes and hoses, used to convey water from the quayside mains to ships, are regularly flushed out and cleansed. Water is allowed to run free for a few minutes before being delivered to the ship's tanks. Samples are periodically submitted for chemical and bacteriological analysis.

(3) *Number of water boats and their sanitary condition.*

Only one water boat is available and this is used at the City docks. The Port Health inspector periodically examines this boat, and supervises when cleansing and cement washing become necessary.

IV.—Port Health Regulations, 1933 and 1945.

(1) *Arrangements for dealing with Declarations of Health.*

Under a local arrangement with the Pilotage Board, Declaration of Health forms are handed to the Master by the Channel pilot in the Barry Roads. In most cases, these forms are completed for delivery to the Health Inspector boarding the vessels on arrival.

(2) *Boarding of vessels on arrival.*

All vessels, coastwise or from foreign, are boarded at the locks on arrival by the health inspector on tidal watch. All vessels from foreign, and all vessels reporting sickness which arrive from foreign via a coastal port are boarded by the medical officer. " Infected " or " suspected " ships are boarded by the medical officer and health inspector at Walton Bay from a tug chartered for this purpose.

(3) *Notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from pilots, customs officers, etc.).*

Wireless messages are relayed to " Portelth," Bristol, if there is any circumstance on board requiring the attention of the medical officer, giving the name of the ship and the expected time of arrival. These messages are forwarded from the Central Health Clinic to the port medical officer and the senior port inspector for appropriate action. Visual signals for transmission to the port medical officer may also be directed to the land signal station at Walton Bay. In addition, masters of foreign-going ships approaching the port are required to hoist whichever of the quarantine signals is appropriate as set out in the 1931 International Code of Signals for visual signals.

(4) *Mooring stations, designated under Article* 10.

(*a*) *Inner mooring stations.*

Avonmouth	...	(a) Royal Edward Dock—North Wall. (b) Old Dock—Dolphin Buoy.
Bristol ...	...	Railway Wharf.
Portishead	...	No. 1 Shed.

(*b*) *Outer mooring station.*

Avonmouth, Bristol and Portishead Docks—Walton Bay.

(5) *Particulars of any standing exemptions from the provisions of Article* 14.

There are no standing exemptions at this port for the reasons indicated in section (2) above.

(6) *Experience of working of Article* 16.

Unauthorised boarding, at one time particularly troublesome, is now reduced to a minimum in this port, the port medical officer and the health inspector being both in attendance at the time of arrival of all vessels referred to in Article 16.

Boarding for reasons of urgency may be permitted by the medical officer under such conditions as are imposed by him, but in no case may an individual so authorised leave a vessel until it is free from control under the Regulations.

It is sometimes impossible, on the other hand, to prevent sailors from " jumping ship " when passing through the locks or on arrival at berth, and in the cases which occurred at this port—all of which caused considerable delay in clearance and berthing—warnings were issued to the masters concerned.

In general, very few steps are taken by ships' masters to secure compliance with the provisions of Article 16 (i).

(7) *Arrangements have been made for:—*

(*a*) *Premises and waiting rooms for medical examination.*

All reported cases of sickness among crew and passengers are examined on board at the time of arrival. Crew and passenger inspections are completed on board shortly after reaching berth. Adequate accommodation, if a detailed examination is required for any other purpose under the Regulation, is available in the medical inspection room of the new Port Health Office, constructed in 1943.

(*b*) *Cleansing and disinfection of ships, persons and clothing and other articles.*

The cleansing and disinfection of infected ships' quarters is carried out under the supervision of the inspectorial staff whenever necessary, using the appropriate disinfectant. Clothing, bedding and other articles are removed by van and treated by steam under pressure at the city disinfecting station. The cleansing of persons is provided for at the city cleansing station. A " typhus scheme " is in operation, whereby delousing of patients or contacts may be carried out by trained and protected teams using D.D.T. powder blowers.

(*c*) *Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations, and*

(*d*) *Hospital accommodation available for plague, cholera, yellow fever, smallpox and other infectious diseases.*

Patients suffering from infectious disease, and all cases requiring observation are removed to the city isolation hospital at Ham Green.

(*e*) *Ambulance transport.*

This is provided for by ambulances belonging to the city.

(*f*) *Supervision of contacts.*

Inspectors make daily visits to all vessels from infected or suspected ports and secure a signed report on the health of crew from the officer-in-charge. Any sickness developing after arrival is thus brought immediately to the notice of the medical officer. When surveillance is required, forward notices, giving the appropriate information, are posted to the medical officers of health of the districts to which contacts proceed after leaving the ship.

(8) *Arrangements for the bacteriological or pathological examination of rats for plague, and*

(9) *Arrangements for other bacteriological or pathological examinations.*

All pathological and bacteriological examinations are conducted at the Preventive Medicine Laboratories at Canynge Hall. Rats from vessels and quays are systematically examined for evidence of plague. Water samples from hydrants or ships' tanks, and articles of food are examined chemically and bacteriologically when the occasion demands.

(10) *Arrangements for the treatment of the venereal diseases.*

Full information concerning the location and hours of opening of the venereal disease centres at Avonmouth docks and at Bristol is given to the crew of every vessel entering the port. This information is contained in handbills, available in several languages, which are freely distributed to each ship. When indicated in-patient treatment, under the direction of the venereal diseases consultant, is available at the Snowdon Road Hospital.

Extensive propaganda is carried out at this port, and here it may be recorded that in the attitude of merchant seamen generally to these diseases an improvement is discernable. One effect of this is a desire for the compressed hospital treatment of syphilis—a form of treatment which is to be encouraged as it affords a maximum chance of cure. (Perusal of V44 Transfer Books show that gross irregularity in treatment, sometimes inseparable from working conditions, too often occurs amongst seamen.) Another indication of this attitude is the rise in the number of cases recorded as non-venereal at the Docks Centre during the year, a substantially increased proportion of these cases having attended for precautionary tests after exposure abroad.

The following table relates to seamen treated at the Avonmouth Centre during the years 1944, 1945 and 1946. Since this centre was established in 1943 the four or five-fold increase in the number of seamen seeking treatment from Avonmouth docks has been maintained. (The figures for Bristol and Portishead docks are included in those for the Guardian House Clinic). See page 120.

Year	Syphilis	Soft Sore	Gonorrhoea	Non-V.D.	Totals
1944 ...	154	19	159	311	643
1945 ...	85	26	150	261	522
1946 ...	67	27	254	291	639

(11) *Arrangements for the interment of the dead.*

Deaths occurring during a voyage, or in port, are fully investigated by the medical officer, and, when infectious disease has been excluded, arrangements for the transference of dead to the city mortuary, and subsequent interment, are made by the ships' agents.

(12) *Other matters, if any, requiring attention.*
There are no other matters arising out of the Regulations which require attention.

V.—Measures against Rodents.

(1) *Steps taken for detection of rodent plague.*

(*a*) *In ships in the port* (page 135).

Measures commence with the arrival of each ship from "foreign," when consideration is given to the bills of health, the deratisation certificate and the declaration of health signed by the master. The undisturbed surface of the cargo is examined prior to the commencement of discharge, and provides valuable evidence of the condition of the vessel with regard to rats. A thorough examination for signs of rat activity is continued during the time the cargo is being discharged.

In 96 per cent. of the vessels so examined during 1946 the rat population was estimated at less than 10. In 4 per cent. of the ships, 10 or more rats were destroyed by trapping and/or fumigation. In 6 ships, rat infestation was pronounced: the figures being 98, 132, 92, 101, 132 and 272 respectively. Four of these six ships possessed valid certificates—two of these valid certificates having been issued only three months previously. In each instance the owners were advised that deratisation was necessary on completion of discharge, and our requests were complied with.

When a valid deratisation or deratisation exemption certificate is produced, on a heavily infested vessel, no suitable legislation exists whereby port authorities can compel the owner to carry out disinfestation. Articles 19 and 20 of the Regulations are not applicable, and the provisions of the Rats and Mice Destruction Act cannot be effectively applied to ships in port. There is a pressing need for the standardisation of measures for the detection and repression of rats from port to port.

During the year 121 ships with invalid certificates were dealt with, 92 receiving exemption certificates, and 15 deratisation certificates following fumigation. Guarantee forms were accepted from 14 vessels wishing to apply for certificates at the final port of discharge in the United Kingdom, and in respect of these the appropriate forward notices were sent to the Port Health Authority concerned.

A total of 1,121 rats were recovered by fumigation and trapping during the year. Approximately 52 per cent., or 587 of these were examined at the Department of Preventive Medicine and were found to be free from B. Pestis infection.

(*b*) *On quays, wharves, etc.* (page 135).

Satisfactory rat repression has been maintained throughout 1946. Permanent rat operators are employed to deal with rat activity on quays, wharves, warehouses, and ground in the vicinity. A total of 2,637 rats were destroyed, and of these, 2,388, or approximately 90 per cent., were caught at Avonmouth docks. This number, showing a 30 per cent. decrease on the 1945 figures, is indicative of improved conditions in the dock area.

A progressive reduction in the annual figure is anticipated.

A detailed survey of the whole dock area was carried out in the third quarter of the year and an all round improvement was noted, with diminishing signs of rat activity in the well known focal points of infestation.

From the dock area 828, or 30 per cent., of the total rats caught were sent to the Department of Preventive Medicine for examination. No B. Pestis were recovered from the rats examined.

(2) *Measures to prevent the passage of rats between ships and shore.*

(i) All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.

(ii) Suitable lengths of tarred hessian are wrapped around moorings, outside the leads.

(iii) Gangways are well lighted at night and when possible are kept raised from the quay.

(3) *Methods of deratisation.*

(*a*) *On ships.*

Fumigation with hydrogen cyanide gas is always recommended. Only one ship was fumigated with sulphur dioxide during 1946.

(*b*) *Premises within the vicinity of docks or quays.*

Frequent pre-baiting, poisoning and trapping is carried out in all premises where rat activity is discovered.

(4) *Measures taken for the detection of rat prevalence in ships and on shore.*

As outlined in (1) (*a*) above, routine inspection is made for signs of rat activity on the undisturbed surface of cargoes prior to discharge. Follow up inspection, including sprinkled sand tests, are subsequently carried out. On shore, regular inspection of all premises and waste ground is made, particular attention being given to premises where foodstuffs are stored.

(5) *Rat-proofing.*

(*a*) *To what extent are docks, wharves, warehouses, etc., rat proof?*

The majority of docks, wharves, warehouses and private establishments within the dock area are of efficient rat-proof construction.

(*b*) *Action taken to extend rat-proofing.*

(i) *in ships.*

When rat-proofing could effectively be carried out without extensive structural alterations, the owners were recommended to do this work. In many ships, rat-proofing was found to be particularly necessary in respect of provision storerooms. In each case, the recommendations were complied with.

(ii) *on shore.*

All buildings constructed in the dock area during the year were made effectively rat-proof. Similar attention was given whenever structural alterations were made to existing buildings.

Hygiene of Crews' Spaces.

During the year 2,281 visits and revisits were made to foreign going vessels, and 1,471 to coastwise vessels.

The figures for dirt and vermin are, as usual, the highest, particularly amongst British owned ships. This is regrettable. It would be reasonable, having regard to the constructional improvements and alterations that have been made, to expect a corresponding improvement in cleanliness and hygiene.

Whilst support should be given to all measures adopted to improve the standards of crew accommodation—and in many cases these are long overdue—it must be brought to the notice of seamen that they have important obligations to fulfil if these standards are to be maintained and bettered. They must realise that they, chiefly, are responsible for maintaining their accommodation in a clean condition. The prevailing indifference, which amounts in some instances almost to neglect, must be replaced by a sense of responsibility. In their own interests the men should aim to prove that they are worthy of improved conditions, for, if they do, their just claims will be more readily met by the shipowners.

Cockroach infestation is very much on the increase, and has claimed a great deal of the inspectors' attention. Most of the ships dealt with during the year were so infested. Insecticides containing D.D.T. have not produced satisfactory results, but Gammexane smoke generators, which became available towards the end of the year give effective promise of control, if not complete eradication, of these pests in ships.

Very few ships are now found to have bug infested quarters. The erection of vermin proof partitions, and the substitution of metal fittings for wood are important contributory factors in this respect.

Frequent contact was made throughout the year with the local senior surveyor of the Ministry of Transport on matters concerning structural defects in crew accommodation.

Dock Sanitation.

Factories and workplaces have been kept in good repair and a cleanly condition. The managements concerned have readily complied with informal requests to make good all defects found during inspection.

Canteens, including adjoining washplaces and sanitary accommodation, have been maintained with satisfactory standards of cleanliness.

Obsolete public conveniences at the Bristol Docks were replaced by five modern type conveniences during the year. The Port of Bristol have now provided up-to-date, hygienic sanitary accommodation in all of the dock areas, and attendants are employed to cleanse these conveniences daily. Frequent inspections have shown that they are maintained in the desired manner.

Refuse collection is carried out by the City Cleansing Department. Waste food from ships and from dock premises, ships' domestic refuse, quayside trade refuse and a considerable quantity of ship trade refuse is collected daily. This work has been done very efficiently, and without delay, even when large quantities of refuse needed removal from the dock to the points of dispersal. The use of Bank Farm and Rockingham sites for tipping was discontinued in mid-October, and all tip surfaces were suitably covered over when tipping was completed. All dock refuse is now taken to the West Town (River Bank) tip.

Good use has been made by ships of the concrete refuse bays on the quayside. Complaints, due to the collection of refuse on ships' decks, no longer occur.

During September many dock workers sustained insect bites which caused a good deal of pain and discomfort, and necessitated medical attention in some cases. These workers were employed at the timber yard. A careful search of this site, and of adjoining waste ground, revealed that the culicine mosquito "Theobaldia Annulata," present in considerable numbers, was the cause of this trouble. This specie of insect, often referred to as the "wood gnat," breeds on the surface of stagnant water particularly in the vicinity of decaying timber. It is most active during the fall of the year, particularly after a wet summer. The Port of Bristol Authority were informed of the matter and measures of control were recommended. Immediate attention was given by the departments concerned, and all breeding areas were eliminated.

Food Inspection.

Compared with the year 1945, there has been a decrease in the amount of certain prepared foodstuffs, particularly frozen meat, discharged at the port. Other food commodities show a favourable tonnage comparison, and, with the resumption of banana shipments, there has been an increase in the amount of fresh fruits arriving during the year.

Attention has been given to methods of handling food cargoes during discharge ; measures for preventing contamination in the holds, on the quaysides and in the vehicles having been brought into effect by stevedores and by the Port of Bristol Authority.

Most food shipments were in a sound condition upon discharge, and condemnation figures are therefore correspondingly low.

The world shortage of food supplies is not overlooked when the reconditioning of food is being supervised. In one instance it was necessary to detain 7,725 carcases of mutton, lamb and pork, of which approximately 53 per cent. were affected as the result of a latent defect in the ship's refrigerator system. By careful and continuous supervision during the process of reconditioning it was possible to save 72 per cent. for use for human consumption.

In one particular mark of a consignment of canned tomatoes a high percentage of tins showed hydrogen swell. A 100 per cent. examination was carried out and all of the affected tins were rejected.

With the permission of the Ministry of Food and the helpful co-operation of Messrs. Elders and Fyffes' representative it was arranged early in 1946 that the Health Department should collect for distribution to the children in Bristol hospitals all bananas picked out as being in too advanced a state of ripeness for dispatch to depots and shops. From eleven shipments, 168 containers of bananas were thus distributed, and were received as suitable and very welcome gifts.

Resort to legal proceedings was not necessary during the year.

Imported foods continue to be consigned to the Ministry of Food and, as in previous years, close contact has been maintained with the various commodity officers.

Public Health (Cleansing of Shellfish) Act, 1932.
Public Health (Shellfish) Regulations, 1934.

There are no shellfish beds or layings within the jurisdiction of the Bristol Port Health Authority. The supply of shellfish marketed in Bristol is obtained mainly from the following sources:

Cockles from St. Clair, South Wales, and King's Lynn, Norfolk.

Escallops from Brixham, South Devon.

Mussels from Appledore, North Devon; and St. Clair, South Wales.

Oysters from Cornwall, others from Thames Estuary and Continental countries via London.

Winkles from Appledore, North Devon.

Whelks from King's Lynn, Norfolk.

Samples of Food examined by Bacteriologist and Analyst.

Article	Examined for	Result
Brisket Beef, canned	Soundness	Unfit for food
Corned Beef, canned	„	Genuine
Cheese	„	Some deterioration, but fit for food.
Flour	H.C.N. contamination	No contamination
Milk, homogenized	Soundness	Genuine
Tomatoes, canned	„	Tin content above limit

Parrots (Prohibition of Import) Regulations, 1930.

Five vessels arrived in 1946 with seventeen birds of the parrot specie on board. Importation was prohibited under the regulations.

Medical Inspection of Aliens. (See Table, page 133.)

During the year 166 aliens arrived at the port and were medically inspected, 30 of these being subjected to a detailed examination. One alien, found to be suffering from an acute infectious disease, was landed and transferred for observation and treatment to the infectious diseases hospital.

The Airport.

Aircraft from "foreign" arrived from time to time during the year, 16 having been boarded and cleared by medical officers of the Port Department. No passengers or crew were detained under the regulations. Aircrew surveillance, however, is continued in respect of aircraft from infected airports which proceed to Bristol for the purpose of maintenance or repair.

Appendix II.

THE ENVIRONMENTAL HEALTH SERVICES SECTION

Chief Sanitary Inspector	F. J. REDSTONE
Deputy Chief Sanitary Inspector	R. WILLIAMS

Senior Housing Inspector	C. E. BOWDEN
Senior Food Inspector	H. M. GOULD
Senior Port Health Inspector	E. I. DAVIES

With comments on the following departmental sections :—

GENERAL SANITATION
HOUSING
MEAT INSPECTION
FOOD INSPECTION
RAT AND MICE DESTRUCTION
PORT HEALTH

SANITARY CIRCUMSTANCES, HOUSING, AND INSPECTION OF FOOD

As the year under review opened one heard the traditional greeting of " Happy New Year " on all sides, but we are all aware that to be truly happy one must be healthy. The British Medical Association has stressed the fact that medical services alone cannot achieve " positive health," but that the health of the people depends primarily upon conditions in which they live and work.

The environmental health services in this city have striven to make further recovery from the retarding influences of the war years, and although much was accomplished it has to be admitted that in some instances our efforts were little more than a salve, leaving the more important problems untouched.

Yet, there are indications that the way has been paved for a more strenuous and satisfactory attack on unhealthy conditions, although, at present one can hardly exceed a claim that the frustrations and set-backs of the war years are but very gradually being overcome. This is the more evident when it is recognised that labour and materials are more rigorously rationed than during the war years.

It is fair to say that the general public should be applauded for the tolerance shown under difficult circumstances, but with patience and the full support of the Health Committee there seems to be no reason why 1947 should not be a happier and healthier year than its immediate predecessors.

The Chief Sanitary Inspector's section of the Health Department carried out a great deal of work in connection with Health Education and apart from many full lectures a considerable number of short talks were given to various organisations who have shown appreciation by requesting that further visits be made to deal with some other aspect of environmental health work about which the general public are showing increased interest; in fact it is known that citizens are beginning to say, " I wonder what the Health Department would think about that," when they see conditions detrimental to public health.

This development is, it is considered, real progress and will bring about the practical application of that old adage, " Prevention is better than cure."

It has been said that the best way to be healthy is to provide good environmental conditions, but it is evident that progress in this connection also insists on an enlightened attitude towards health matters on the part of the general public. The principal health rules must, therefore, be understood if public health facilities are to be accepted and used in full measure; it is for this reason that the success or otherwise of the services provided depends so much on the co-operation of the public, It can be reported that in Bristol there is definitely a lively response to all measures directed towards the health and well being of the citizens and it is confidently anticipated that with the splendid help rendered by the local press, further progress will be made towards the wise dissemination of public health knowledge.

Successes during the year by Officers of the Section include:—

G. J. Creech:	Certificates of the Royal Sanitary Institute— Meat and Other Foods Inspector. Advanced knowledge in duties of Sanitary Inspectors.
D. I. G. Smith:	Certificate of the Royal Sanitary Institute— Sanitary Science.
B. Firminger:	Diploma in Public Administration (Part 1), Bristol University.
C. E. Bowden:	Diploma in Public Administration (Part 1), Bristol University.
R. Williams:	Diploma in Public Administration (Part 1), Bristol University. Scholarship award by National Association of Local Government Officers for essay on "The Public and the Local Authority."
F. J. Redstone:	Elected a Fellow of the Royal Sanitary Institute. Appointed Examiner by the Royal Sanitary Institute.

Office Administration.

After two years' experience with the new set-up in office procedure and organisation, it is worth while making a brief analysis and comparison of the results obtained.

In 1939 there were 77 statutory notices served, whilst in 1946 the figure for such notices was more than 2,000. In addition to the service of notices, correspondence is a very heavy item in the work of the department, and this year over 10,000 communications were received. 12,000 postal packages were sent out, involving over 18,000 outward items of correspondence. This work, coupled with the great extension of the report to the Committee, has thrown considerable strain on the administration of the department.

The Committee Report itself gives a further indication of the vast increase in the activities of the inspectorate. Before our new arrangements this Report comprised a maximum of six foolscap sheets. In the year under review up to forty foolscap pages were submitted to each fortnightly Committee, concerning 3,000 properties in the year. The preparation, checking and setting out of the full data is a matter of no small moment.

Without the new set-up it would have been impossible to deal with the greatly increased amount of work, and these methods have been so successful that many authorities, including Rural, Urban, and one County Council, have sent representatives to study the system employed with a view to improving their own particular form of organisation.

Repairs to Property in Owners' Default.

Legal proceedings were instituted with regard to the repairs required at 157 properties. Of these 104 have been complied with and 53 remain outstanding for various reasons. It is of interest to mention that in 81 of the cases complied with the work was ultimately carried out by the owners. This does indicate that these cases are taken to court only where it is absolutely necessary and where, in fact, there is nothing to prevent the owner carrying out the work.

The remaining 23 cases were, after the usual formalities, carried out by builders working as contractors for the Bristol Corporation.

The figure of 81 cases, where work was carried out by owners at some stage after legal proceedings were instituted, is double the number so completed in 1945 and there is no doubt that prompt action by the department in this matter has had the effect of inducing owners to carry out their repair work without carrying legal proceedings to default action. In the future, no doubt, they will see the advantage of getting this work done before even legal proceedings are necessary.

Housing.

Annual reports dealing with the progress of housing during the last few years have stressed the many difficulties encountered in taking action to secure the repair or demolition of insanitary properties and it is well known that these are due to the shortage of labour and building materials. It was hoped that the New Year would see the position improve and that the dilapidations which had accrued over the war years would be gradually overcome and dealt with side by side with the provision of new houses.

The Ministry of Health has, however, made it clear that these needs must be subordinated in the interest of providing additional accommodation and that repairs must be kept to the bare minimum compatible with tolerable conditions.

At the same time it would not do justice to the work of the department to give the impression that housing procedure had remained entirely in abeyance and perusal of the following figures will show that action was taken in a number of cases where the property was so dilapidated or structurally dangerous as to demand urgent action.

Housing Act, 1936—*Section* 11 *and* 12 *Procedure.*

Number of houses represented to Housing Committee	42
Demolition Orders made	26
Closing Orders made	12
Undertakings to Repair accepted	7
"Minimum repairs" accepted	12
Undertakings "not to use" accepted	2

Houses Repaired.

Section 9:	Informal notices complied with	2
	Formal notices complied with	2
Section 11:	Undertakings to repair completed	5

Dangerous Buildings.

The past year has seen an increase in the number of dangerous buildings and although this problem is one falling within the responsibilities of the City Engineer's Department, close liaison has been established and maintained so that due regard may be given to the desirability or otherwise of rebuilding such properties, many of which are of a type normally dealt with by way of demolition.

Reinstatement of War Damaged Properties—Joint Visits.

It was found that the Departments of Health, Housing and City Engineer's were concerned in the proposals relating to applications and plans submitted to the Chief Planning Officer with a view to reinstatement of war damaged properties which are the subject of cost of works payment by the War Damage Commission. To avoid undue delay in dealing with such urgent matters, the City Engineer considered that a joint visit could be made to these sites, when the officers of the three departments concerned could meet and discuss the proposals, the decisions made at these meetings being reported to the respective committees.

This practice has proved to be of invaluable assistance in clearing up the health, planning and licensing aspects of each proposal and is much appreciated by the applicants, their architects and surveyors.

Survey of Central Area and Proposed Trading Estates.

It is well known that all rural authorities have been carrying out a survey of dwelling accommodation at the request of the Ministry of Health, and in the last annual report reference was made to a housing survey proceeding in this city.

Progress on this work has been slow, due to the shortage of sanitary inspectors, and for this reason primary attention has been focussed on the condition of properties used for human habitation within those areas defined under the replanning schemes, but this survey will be extended when circumstances permit in order to obtain a clear picture of housing conditions throughout the city.

Particulars are given below of the two main areas surveyed and it will be seen that well over 5,000 properties have been inspected. The information contained in these reports has been of great assistance to the Chief Planning Officer in connection with the Council's replanning schemes.

Central Area.

Total number of properties involved 5,039

These were classified as—

(*a*) Dwellings, whole (1) Repairable
(2) Non-repairable
(3) Subject to Clearance and Demolition Orders.

(*b*) Dwellings, part (1) Repairable
(2) Non-repairable
(3) Subject to Closing Orders.

(*c*) Other properties (whole) 2,235

(*d*) Basements (dwelling accommodation) 1,041

Bedminster Trading Estate.

Total number of properties involved 408

These were classified as—

(*a*) Dwellings, whole (1) Repairable
(2) Non-repairable
(3) Subject to Clearance and Demolition Orders.

(*b*) Dwellings, part (1) Repairable
(2) Non-repairable
(3) Subject to Closing Orders.

(*c*) Other properties (whole) 44

(*d*) Basements (dwelling accommodation) 36

The particulars enumerated during the survey, an analysis of which is subseqently transferred to key maps, have been set out in the form below. Relevant particulars in connection with ten properties can be recorded on this one form by means of analysis columns to the right of the headings.

HOUSING SURVEY. Block No. Section
ROAD Inspector Date

Street No. of Building

---

1. Character of Building
A, B, C, D, E, F, G, H, I, J, K, L, M, N

---

2. Width of streets: Front
Rear

---

3. BAD ARRANGEMENT:—
External: A
B
Internal
Remediable
NON-Remediable

---

4. General disrepair: A
B
Remediable
NON-Remediable

5. SANITARY DEFECTS:—
Lack of air space
Lack of ventilation
Darkness
Dampness (serious)
Absence of adequate or readily accessible water supply
Absence of adequate or readily accessible sanitary accommodation
Inadequate paving or drainage
Remediable
NON-Remediable

---

6. DOMESTIC AMENITIES:—
Inadequate kitchen accommodation
Inadequate kitchen sink
Inadequate food larder
Inadequate cooking facilities
Inadequate washing facilities (D)
(P)
Absence of Bath
Remediable
NON-remediable

---

7. Well maintained (shown thus ✓)

---

8. ANALYSIS.
Repairable
NON-repairable
PREVIOUS HOUSING ACTION.

---

9. Number of families
Accommodation unsatisfactory

---

10. BASEMENT ROOMS.
Front
Back
Cellars

---

11. Attics present

---

12. No. of storeys (excluding attics)

Street Number of Building

X indicates defects present.

Assistance in Connection with the Allocation of Council Houses.

During the year the Bristol Housing Committee adopted a " Points Scheme " for the allocation of council houses, and this necessitated decisions being made as to those families entitled to additional points because of residence at insanitary properties.

The Housing Manager discussed this problem with the Chief Sanitary Inspector who arranged for some 20,000 applications to be sifted and reported upon by the sanitary inspectors who worked at some pressure to complete this great task in the shortest possible time. Appreciation for the expeditious way in which this work was carried out was expressed by the Housing Manager, who further requested that new applications as received from time to time be dealt with in this way.

Re-occupation of Rooms subject to Closing Order.

The department reported a case to the Housing Committee where rooms subject to a Closing Order had become re-occupied. A prosecution ensued and the owner, who pleaded guilty, was fined the sum of £1 and 15/- costs.

Applications for Rent Certificates.

Nineteen certificates were issued under the Rent and Mortgage Interest Restrictions (Amendment) Act to occupiers of dwellings not in a reasonable state of repair.

Squatters' Camps.

In August of this year there was an invasion of the various military camps in the city by people who were ultimately referred to as "Squatters." In the city some twelve camps were so occupied, including one at Whitchurch, which was partly in the Bathavon Rural District Council area.

The medical officer of health took the view that as these families were in occupation, it was necessary to take such steps as were appropriate to protect the public health and prevent any outbreaks of disease. This action was fully supported by subsequent instructions from the Ministry of Health to the effect that water supplies and suitable arrangements for sanitation should be provided immediately. By that time the arrangements were well in hand.

The families encamped numbered 272, comprised of 531 adults and 304 children, making a total of 835 persons, of whom 34 were expectant mothers. The average size of the families was 3.06.

From the information obtained it appeared that 98 per cent. of the families were applicants for council houses, 261 of which were highly pointed. 4.5 per cent. of the total families encamped were from outside the city area.

The Health Department operated as the co-ordinating body with the Housing, Cleansing, and City Analyst's and City Engineer's departments, in collaboration with whom, and with the Bristol Waterworks Company, it was possible to make a supply of water available to every camp, each supply being chlorinated where necessary so that the water was safe to use. This entailed considerable work for the Housing and Engineer's departments in connection with the plumbing necessary. Similarly, after repairs, the sanitary accommodation available was made satisfactory, but certain re-allocation was necessary with regard to the separation of the sexes where the accommodation was communal.

The Cleansing Department made adequate provision for the supply of dustbins and the collection of refuse, including edible wastes. The organisers of the camps were all supplied with a quantity of disinfectant for issue to the campers under their control for use in scrubbing out the huts and sanitary accommodation. Full instructions were furnished with the supplies of disinfectant.

The Bristol Corporation Electricity Department and the Bristol Gas Company were contacted with regard to light and cooking facilities. The fire risk at these huts was stressed.

The sanitary inspectors organised the services mentioned above and supervised the chlorination of the water supplies. They elicited much information which proved to be extremely useful to the Housing Department. All this extra work entailed week-end and evening activities far beyond office hours.

In most cases our efforts received every co-operation from the campers concerned, who showed themselves most anxious to avoid any outbreaks of illness in their camps. In fact, in one camp we were able to make arrangements for the immunisation of 24 children against diphtheria.

The absence of outbreaks of sickness in the squatters' camps was no doubt largely due to the prompt measures taken in the early stages of this movement.

Tents, Vans and Sheds.

The establishment of gypsy and similar encampments is always of special concern to public health departments and within the limited legislation available to deal with the conditions found, every effort was made to safeguard the health of residents in the invaded neighbourhoods. In every case found within the city area it was considered that the vacation of land so used was the only satisfactory procedure.

As was expected, petitions and individual complaints were received about people who had pitched their tents and vans on bombed sites, near tips, and on unfenced pieces of land convenient for the purpose of these nomads, who care little about the provision of proper sanitation or water supply. Reports made to the Health Committee were followed by the necessary action which prevented the continuance of unfit sites for this purpose, and it was made clear that establishments of this kind do not, and will not find a ready welcome in this city.

Filthy and Verminous Homes.

Complaints were received during the year with regard to unsatisfactory conditions in homes ; on investigation and during routine visits some houses were found to be in a filthy and verminous state. Attention was drawn in the last annual report to the number of "bad families" which is admittedly small, but it should be emphasised that Court Orders under the Public Health Acts and fines inflicted cannot immediately alter the habits of a lifetime. These cases require constant supervision and encouragement to secure the slightest improvement.

Because of the many problems these families present, the Chief Sanitary Inspector submitted a special report to the Health Committee and suggested that what is really needed is the employment of special "home visitors" to deal with this problem ; someone willing and capable of demonstrating methods of cleaning and home-management and with the tactful personality necessary to approach backward families.

The Health Committee resolved to appoint representatives to discuss the proposal with the Housing, Social Welfare, and Education Committees of the Council.

It is important that one should not give the impression that there are a large percentage of homes in this state—that is not so, and perhaps this is all the more reason why these unsatisfactory homes should be tackled. The "power of example" of other clean homes and the training for home-making now more extensively being taught in schools and by lectures to Youth Clubs, will, it is thought, be bound to pay a handsome dividend in preventing anti-social habits of this kind.

Since the above-mentioned report was made in the early part of 1946 Norwich City Council has made a start by appointing a "home-adviser" to visit derelict families and other local authorities are considering a scheme of this kind.

The conditions under which aged and infirm people reside is another phase of human life with which the sanitary inspectors have to deal and, during the year, the chief sanitary inspector was authorised by the Health Committee to accept an invitation to membership of the Bristol and South West Regional Old Peoples' Welfare Committee. The Health Department works in close collaboration with the National Council of Social Service in this work and on occasion the medical officer of health has been requested to deal with lonely and aged people who in their own interests should be compulsorily removed to an institution. This power is used with very great restraint and every possibility of allowing these unfortunate people to remain in their own homes is explored and put into practice.

In many cases this was achieved by the provision of nurses, home helps, friendly visitors, and the delivery of cooked meals at frequent intervals ; only when it is realised that these services would fail to provide the necessary medical and other attention required does the medical officer of health consider reporting such cases to the Health Committee prior to securing a magistrate's Order for removal under the Bristol Corporation Act, 1930.

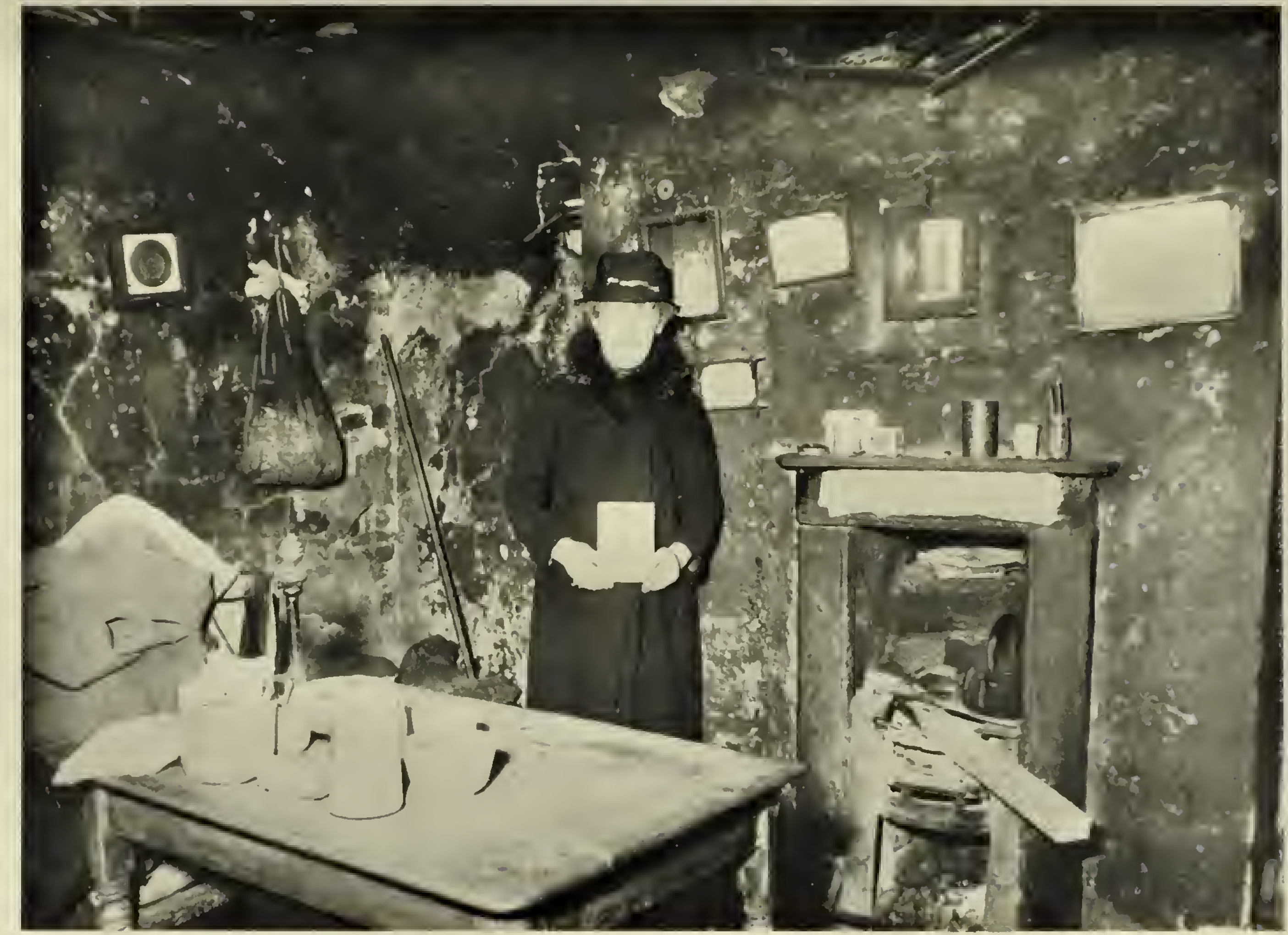
The Health Department assisted at the Council of Social Welfare Services "Old Age in the New World" Exhibition which was held in Bristol, by the provision of large scale photographs and other material.

Factory Inspection.

The number of complaints received from His Majesty's Inspector of Factories relating to conditions existing in factories fell to something like half the number in the previous year.

Of the 66 referred to this department, 47 have been dealt with and there are 19 outstanding. Amongst those outstanding are firms who have every desire to comply with our requirements but, unfortunately, the shortage of building materials completely prevents them from doing the necessary work.

Every endeavour is made by this department to assist by giving support to applications for materials where the need is urgent. Even so, such work has to take second place to the need for houses.



Aged person living under unsatisfactory conditions — occupant proudly exhibits clear rent book, tenancy 32 years.

House condemned 1946.

SNOWDON ROAD HOSPITAL,
FISHPONDS

Care of aged persons. Patients enjoying sunshine on the terrace.

Rat Destruction.

We are all vitally concerned with the present serious food shortage, and everything must be done to avoid further tightening of our belts. Even if harvests prove bountiful, present human wants cannot be satisfied out of future plenty, and the need for the protection of our food stocks is urgent.

One of the chief hazards is the wastage caused by the ravages of rats. These and other rodents are responsible for millions of pounds' worth of damage to our food. It is estimated that it costs £1 a year to feed a rat, and with a population in this country running into many millions it takes no mathematical ability to visualise the vast sum involved.

The Health Department is conscious of the rat menace and, in fact, with the collaboration of the Ministry of Food and the assistance of the City Engineer has, by systematic treatment, brought under control the rat population in the sewers.

Now that the underground movement has been arrested the time has come to attack the more adventurous rat which infests our homes, food shops, warehouses and all surface buildings. To this end, a new scheme for the destruction of these rodents was submitted by the Health Committee to the Bristol City Council and their approval obtained.

Neither a rat catcher nor a bricklayer can operate successfully without a proper plan, and the new method aims to provide the systematic elimination of rats and mice by what is known as the " Block Control Scheme."

The city has been divided into areas, each of which is subdivided into suitable blocks of properties. The campaign takes the form of a survey of every house and building by a special team of investigators, trained by the rodent officer, in the detection of rat and mice infestation. From the information so obtained the rat operators carry out a building to building drive to exterminate the rats in these districts in priority order, thus eventually covering the entire city.

The full course of treatment for a particular block of property and, in fact, every building in that block, is as follows:—

The rat operator, having selected the baiting points in the premises, will pre-bait for four days; that is, put down plain bait with the object of attracting the rodents and then, on the following day lay poison bait, thus completing one week's treatment. The premises are then left for a week and the procedure repeated on the third week, so that you have one week's treatment, one week's rest, and a further week's treatment, after which the premises would be cleared. It may be found necessary to follow up some areas for longer periods, but generally the scheme operates as described above. At the same time the sewers in these localities are treated so that there is simultaneous action both above and below ground.

Free Service for Occupiers of Private Houses.—The Rats and Mice Destruction Act, 1919, places the liability of rodent repression upon " occupiers " of premises. However, in an effort to ensure that no impediment would arise, and in view of the fact that the conduct of this vitally necessary campaign was likely to introduce factors outside the statutory liability of the householders, the local authority and the Ministry of Food together undertook to relieve such occupiers of private dwellings, of charges for destruction of rats at these premises, when carried out by the local authority in the course of this campaign. All this means that private houses get free service.

So far—so good ; but whilst the local authority, with the support and assistance of the Ministry of Food, can execute the necessary technical work, the ultimate success of the scheme is absolutely dependent upon the willing co-operation of the public. All responsible citizens are urged to assist the investigators and operators in their difficult tasks and to report to the Health Department all rodent infestations.

The medical officer of health is concerned, not only with the food aspect, but also with the fact that the rat is a disease carrier and is a possible source of infection. The public is urged to do all in their power to assist the local authority to get rid of this threat to our health and food supplies. " The conservation of food is second only to the preservation of life."

The following details of the work carried out during the year have been provided by the rat repression officer:—

"The total number of complaints received was 1,444 and this figure is slightly in excess of that recorded during 1945. A corresponding number of informal notices were served, but in no instance was statutory action necessary. Following the usual procedure with regard to the condition of premises and the financial standing of the occupiers, 554 dwellings were serviced free of charge.

Premises cleared by the occupiers under the direction of the department numbered 97 and the total premises cleared of infestation during the year was 1,107. There were 674 routine visits made to various hospital, clinic and nursery premises with the result that almost complete freedom from all pests exists in these places at the present time.

The treatment of refuse tips under the control of the transport and cleansing officer was persisted with, particular attention being paid to those likely to create nuisance to adjoining properties. It is pleasing to record that the whole of these tips are being maintained in a satisfactory condition.

The offensive trades in the St. Philip's Marsh area were subjected to the usual intensive measures and during the year under review 1,830 brown rats have been recovered by trapping. The result of these efforts has shown a considerable drop in infestation throughout the whole of the St. Philip's Marsh area.

The black rat problem caused some concern during the year and there has been spasmodic infestations throughout parts of the city, 647 of this type being caught as compared with 970 during the previous year ; there are thus definite signs that some of the major infestations have been successfully broken up. In addition, Avonmouth and Portishead Docks have been subjected to a survey on M.O.F. Block Control lines and the systematic treatment carried out resulted in both areas being completely under control. The investigators under the M.O.F. scheme are working in the area of the River Avon, south of the City Docks, and it is proposed to extend this survey into the docks precincts in the near future.

Maintenance treatment of the city sewers was carried out in an excellent manner by the city engineer's department and this, combined with surface treatment, has shown good results.

Despite adverse weather conditions and shortage of staff, the N.S. 12 Private Dwellings Scheme continues to make good progress and, up to the end of the year, 26,000 premises had been visited (approximately one-third of the city area) and 1,462 cases of infestation were treated.

The number of casual complaints of rats and mice has continued at a high level during the year, and it is possible that the Block Control Scheme is not yet sufficiently advanced to affect this type of complaint.

The excellent manner in which the above duties have been carried out is due to the enthusiasm and team work of the staff concerned."

Noise Nuisances.

During the year the Health Department received a large number of complaints with regard to noise nuisances and the medical officer of health expressed the view that noise is becoming more and more a public health problem. There is no doubt that, on the whole, noise is disagreeable to many persons and that this accessory of the mechanical age in which we live has, in some cases, attained such proportions that steps must be taken to reduce its intensity and arrest its growth.

There is no general power conferred upon local authorities to deal with nuisances arising as a result of noise, but some local authorities have certain powers contained in private Acts enabling them to deal with this matter.

The Bristol Corporation Act, 1938, Section 65, provides that:—

Noise Nuisance.

(1) A noise nuisance shall be liable to be dealt with as a statutory nuisance under the Act of 1936 ; Provided that no complaint to a justice under Section 99 of the said Act shall be of any effect unless it is signed by not less than three householders or occupiers of premises within hearing of the noise nuisance which is the subject of the complaint.

(2) For the purpose of this section a noise nuisance shall be deemed to exist where any person makes or continues or causes to be made or continued any *excessive* or *unreasonable* or *unnecessary* noise *which is injurious or dangerous to health.*

(3) In any proceedings under the Act of 1936 in respect of a noise nuisance occasioned in the course of any trade business or occupation it shall be good defence for the person charged to show that he has used the best practicable means of preventing or mitigating the nuisance having regard to the cost and to other relevant circumstances.

(4) Nothing contained in this section shall apply to a railway company or the Bristol Waterworks Company or their respective servants exercising statutory powers.

(5) Nothing in this section shall affect the power of the Corporation to make byelaws under section 249 of the Act of 1933."

It has been previously pointed out by other writers on this subject that, generally speaking, it is not the person who creates the noise that suffers most so much as others in the vicinity.

The owners of sports cars and motor cycles appear to be immune to the noise created by their machines. In fact, some seem pleased with it, as does the radio fan with the blast from his loud speaker. Complaints about noise vary in relation to position in the city. For instance, in a comparatively quiet residential neighbourhood, intermittent noises such as hammer blows or the unsilenced exhaust of an internal combustion engine are said to be more distracting than the continuous roar of traffic in the city.

Undoubtedly, in the absence of the present man-made accoustical medley the nation's nerves would be much improved, and experiments have shown that, whilst the normal noises made during working hours would not induce a highly nervous condition, it is essential that the slumbers of a nation shall be peaceful to maintain health. The whole problem of noise led to the establishment of the Noise Abatement League and this society (president, the Rt. Hon. Lord Horder), was formed for the purpose of reducing and, where possible, eliminating all unnecessary and harmful noises. Its object is to educate the public as to the harmful effects of noise upon health and to secure general appreciation of the fact that modern silencing methods, especially when undertaken in the early stages of building operations, can very considerably reduce and even entirely eliminate both interior and exterior noise.

When necessary and advisable, the League promotes legislation to deal with specific noise problems and carries out research work through a technical committee which also investigates members' noise problems and suggests remedies.

The chief sanitary inspector presented a special report to the Bristol Health Committee on the need for noise abatement and among the specific cases dealt with during the year were nuisances arising in connection with saw mills; low flying and testing of aircraft; wireless loudspeakers and motor cycles at sports grounds; machinery in premises adjoining dwelling houses; clatter of metal baking tins during the night hours; sheet metal work in residential areas; use of sirens and steam whistles. In all these cases action was taken to reduce the excessive noise complained of, but it is pointed out that the powers contained in the Bristol Corporation Act of 1938 are limited in extent, and further, that many industries are unsatisfactorily sited in relation to residential properties.

There is no doubt that the proper application of all that is known about noise abatement will ensure a quieter environment, and already the crusade against noise in Bristol, initiated by the Health Committee, has brought about much improvement which is appreciated by the citizens.

It is felt, however, that the greatest measure of improvement will be secured by close collaboration between the Town Planning and Health Departments in controlling the establishment of noisy industries in or near residential areas. Until replanning secures the development of adequate industrial trading estates efforts will be made to minimise noise.

The Public Health Aspect of Refuse Disposal by Tipping.

It is the practice in this city to dispose of a considerable quantity of household and other refuse by means of tipping, and it is a pleasure to report that by close collaboration between officers of the Health and Cleansing Departments all tips at present in use are being brought under control on modern and scientific lines.

The Ministry of Health's recommendations for procedure in connection with controlled tipping is now being established and it is the intention to follow this policy through in order to prevent public health nuisances arising.

Although the past summer has not been troublesome from fly infestation point of view, it is indicative of the progress being made that no serious complaints have been received about any nuisance arising on the tips under the control of the newly formed Transport and Cleansing Committee.

Controlled Tipping.

The term "Controlled Tipping" describes a system of disposing of refuse in a methodical manner, and disused excavations or low lying sites may in this way be re-claimed for useful public purposes. The Ministry of Health has made the following recomemendations in connection with this matter.

1. (1) The deposit to be made in layers.

    (2) No layer to exceed six feet in depth.

    (3) Each layer to be covered on all surfaces exposed to the air, with at least nine inches of earth or other suitable substance; provided that during the formation of any layer not more than six square yards may be left uncovered at any one time.

    (4) No refuse to be left uncovered for more than 24 hours from the time of deposit.

    (5) Sufficient screens or other suitable apparatus to be provided, where necessary, to prevent any paper or other debris from being blown by the wind away from the place of deposit.

2. Every person who deposits any filth, dust, ashes, or rubbish likely to cause a nuisance if deposited in any water must, so far as practicable, avoid its being deposited in water.

3. Every person who deposits any filth, dust, ashes, or rubbish, must take all reasonable precautions to prevent the breaking out of fires and the breeding of flies and vermin on or in such deposit.

4. If the material deposited at any one time consists entirely or mainly of fish, animal or other organic refuse, the person making such deposit must forthwith cover it with earth or other equally suitable substance at least two feet in depth.

5. Every person who deposits any filth, dust, ashes, or rubbish must take all practicable steps to secure that tins or other vessels or loose debris likely to give rise to nuisance are not deposited in an exposed condition on or about the place of deposit.

6. Sufficient and competant labour must be provided in connection with the deposit to enable the necessary measures to be taken for the prevention of nuisance.

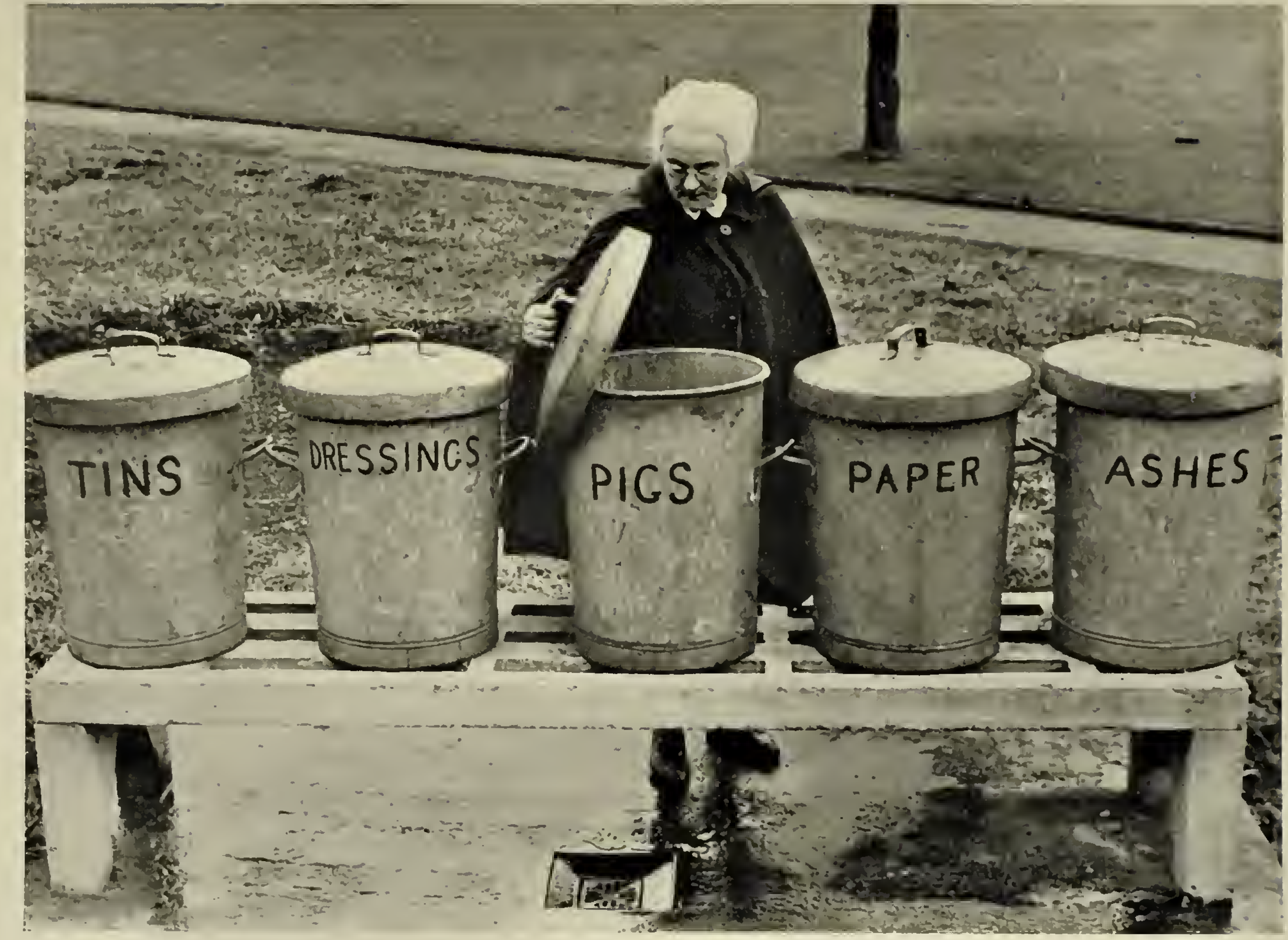
7. So far as practicable each layer of refuse which has been laid and covered with soil must be allowed to settle before the next layer is added.

8. Wherever practicable the person making the deposit must avoid raising the surface of the tip above the general level of the adjoining ground.

9. All refuse must be disposed of with such dispatch and be so protected during transit as to avoid risk of nuisance.

Bristol Tips in use during 1946.

Coles—St. Philip's Marsh.
South Liberty—Bedminster.
Ashton Gate—Ashton Vale.
West Town—Shirehampton.
Chittening—Avonmouth.
Brentry.
Fishponds—Manor Road.
Hollychrome—Charlton Road, Fishponds.



HYGIENIC STORAGE OF REFUSE

The Medical Officer of Health desired improvement in the methods of storage at our Hospitals and Institutions of refuse awaiting collection, which was usually kept in odd containers frequently placed in neglected corners. The construction of concrete bays drained to a gully with a slatted concrete platform which allows approved type bins to be stored in an orderly and sanitary manner was the solution provided.

MEAT INSPECTION

Bristol is the slaughtering centre for home killed meat consumed in the city and other areas adjacent thereto. Every carcase is thoroughly inspected in a routine manner, and above a Meat Inspector is shown carrying out these important duties at the Bristol Corporation Public Abattoir, Gordon Road.

Accompanied by Mr. H. M. Ellis, the Transport and Cleansing Officer, the Chief Sanitary Inspector made a tour of the above tips and below is set out in some detail the method of control and treatment operated in all cases.

1. *Covering.*

(a) *Surplus Soil and Hard Core.* As much surplus soil and hard core is obtained as possible, principally from the City Engineer's Works Sections, but also from private contractors.

(b) On several of the tips horses and carts are engaged in transporting the decomposed matter from old tipping sites for use as a covering, as this is excellent material for this purpose.

(c) *Screened Dust.* Dust to the extent of some 25 tons per day is screened out of the refuse handled at the Eastville Refuse Disposal Works and used for covering refuse on the various tips. As this dust must necessarily contain a certain percentage of putrescible material, steps have been taken to prevent nuisance arising from the dust and, at the same time, to so treat the dust that in addition it forms a good seal against pests breeding on the tips. The method installed is for a high pressure pump to spray an insecticidal fluid containing gammexene in an almost atomised form into the dust as it falls from the screen into the hopper. The sprays are so arranged that an excellent diffusion is given whilst the control is designed so that it is impossible for the screen to be operated without at the same time operating the pump for the sprays.

2. *Treatment of Tips.*

In addition to the covering being provided and strict steps being taken to ensure that no undue depth is worked at any one time, the following methods are also being used as a control against nuisance by pests, rodents, or odour.

(a) *Creosote.* The working face of the tip is saturated each evening with crude creosote, while at the week-ends it is totally covered and also saturated with creosote.

Where tipping is carried out in quarries, the quarry walls to the height of some three feet above the level of the tip are painted with creosote.

(b) *Bleach Powder.* Very large quantities of bleach powder have been obtained from the Regional Civil Defence stores and these are being used as follows:—

> The banks of the tips, after being covered, are dusted with a liberal application of bleach powder.
>
> The joint of the tip to the quarry walls is filled with a liberal application of bleach, thus ensuring that any cracking would result in bleach falling into the crack.

(c) *D.D.T. Powder.* The latest type of hand operated rotary sprayer has been obtained and back dusting of tips with D.D.T. powder is carried out when and where it is considered necessary.

It will be seen that the most recent pest destruction materials have been incorporated in the system adopted, and as this matter is of such importance from the public health viewpoint, the Transport and Cleansing Officer attended a meeting of the Health Committee to give information regarding future policy and reply to any further points about which the Health Committee desired to be satisfied in their efforts to safeguard the city's environmental health conditions.

Rubbish Deposits.

A number of offensive accumulations were quickly cleared as a public health measure from various sites in the city. The attention of the Health Committee was drawn to the practice of persons who disposed of their rubbish by creating accumulations on waste land and bombed sites and the difficulty of dealing with such cases was emphasized.

The Chief Sanitary Inspector expressed the opinion that in order to keep such undesirable practices to the minimum, specific byelaws should be secured. This would allow satisfactory action to be taken more rapidly than is at present the case and prevent a great deal of offence and rat harbourage now to be found throughout the city.

Rag Flock.

The object of the Rag Flock Acts, 1911 and 1928, and the Regulations of 1912 is to prohibit the sale and use of unclean flock produced from rags for the manufacture of articles of upholstery, cushions and bedding. The sanitary inspectors are specially authorised for duties under the Act which consists mainly of taking samples for analysis followed by the necessary action where samples do not comply with the prescribed test, which is as follows: —

> " Flock shall be deemed to conform to the standard of cleanliness when the amount of soluble chlorine in the form of chlorides removed by thorough washing with distilled water at a temperature not exceeding 25 degs. C. from not less than 40 grammes of a well mixed sample of flock does not exceed 30 parts of chlorine in 100,000 parts of the flock."

During the year thirteen samples of flock were taken and of these one failed to comply with the prescribed standard. It has been contended by health officers for many years that the legislation for dealing with the testing and cleanliness of this material is inadequate. The report of the Inter-Departmental Committee formed in 1938 on the Rag Flock Acts was published by the Ministry of Health during the year and the terms of reference for this Committee were as follows:

> " to consider whether the Rag Flock Acts, 1911 and 1928, and the Regulations made thereunder are adequate to secure proper cleanliness of rag flock used for the manufacture of upholstery, bedding and other household furniture in Great Britain, or whether it is desirable that the provisions of those Acts and Regulations should be amended and if so, in what respects; and whether all or any of the provisions applicable to rag flock should be applied to materials other than rag flock which may be used in the manufacture of the said articles."

In view of the public health aspect it is extremely important to note that the conclusion reached by the committee during their extensive investigations was that the objects for which present legislation had been formed have not been satisfactorily achieved. It is for this reason that new and improved legislation will be welcomed in Bristol and by health authorities throughout the country. It is indicative of the progress being made in the forming of health laws that among the witnesses appearing before the above-mentioned committee were representatives from the Society of Medical Officers of Health and The Sanitary Inspectors' Association.

Disinfection—Feeder Road Station.

The disinfection of premises and articles following cases of infectious disease was continued in accordance with routine practice.

It is of some interest to note that the total number of jobs carried out by this essential service was 6,776, an increase of 671 over the 1938 figure.

In addition to household bedding a total of over 26,000 separate articles, mattresses, blankets, etc., were dealt with from Ministry of Works hostels, H.M. Forces medical examination centres, and lodging houses in the Bristol area.

Apart from the continuous use of two large steam disinfectors, some idea of the extent of the general disinfection and disinfesting work carried out can be gauged from the following quantities of material used during the year: —

Disinfectant—90 gallons; Liquid insecticide—395 gallons; Gammaxane DO34—1 cwt.; and D.D.T. powder mixture—30 lbs.

Air Sanitation.

The subject of respiratory conditions in factories, hospitals and similar buildings continues to receive attention.

It was emphasized in last year's report that the Medical Officer of Health and Chief Sanitary Inspector were extremely interested in this aspect of environmental health work and were pursuing the problem of adequate atmospheric disinfection.

A great deal of independent and collective research is at present being carried out on this subject and the number of contributions in recent years to the medical press on airborne and dustborne infection has been very large. It can be said that dust has been proved to carry infection and in crowded and unventilated atmospheres it constitutes a real danger; that its sterilization whilst airborne is possible in confined spaces and may be brought about by the projection of Aerosols from atomising machines or other methods has been claimed.

This does not, however, solve the problem of dust arising anew from floors and ledges, but it has been shown that this may largely be overcome by suitably treating floors to create a physical trap for the dust and bacteria and it has been stated that the regular spraying of floors with an efficient germicide or treatment with antiseptic sweeping compound can be of considerable assistance in this respect.

Exemptions under Shops Act, 1934.

Under section 10 of this Act there must be provided and maintained suitable and sufficient sanitary conveniences for the use of persons employed in or about a shop. A certificate of exemption from this provision shall not be granted in respect of any shop unless the local authority are satisfied that by reason of restricted accommodation or other special circumstances affecting the shop is is reasonable that such a certificate should be in force in respect thereto, and that suitable and sufficient sanitary conveniences are otherwise conveniently available.

At first sight many applications for such exemption appear to be reasonable, but on investigation it is often found that it is quite possible and practicable to provide sanitary accommodation. The view held by the department generally is that proposals for new shop premises ought not to be approved unless provision has been made for such facilities.

Regulations—Export Packing Materials.

Certain Dominion governments have special regulations requiring that straw and similar materials used in connection with the export trade shall be disinfected prior to use for this purpose. It is a little known aspect of public health work that the disinfecting process in Bristol is supervised by the sanitary inspectors to ensure that the requirements are fully observed.

The process consists of placing the straw, etc., loosely in a specially constructed brick built compartment, which is raised to a temperature of at least 76 degrees F., after which 10 oz. of formaldehyde solution (containing not less than 37 per cent. formaldehyde by weight) is injected into the compartment on the basis of that quantity for each 1,000 cubic feet of space. The compartment is then closed for not less than eight hours.

Regular visits are made to the manufacturing premises concerned by the district sanitary inspector and samples are taken from time to time to test the strength of the formaldehyde solution—this has in each case been reported well up to the required standard.

The Regulations require that all invoices for goods packed in hay, straw, chaff, or flax rug must bear a declaration in the following terms:—

> "I hereby certify that the hay, straw, chaff or flax rug used as packing material for the goods on this invoice has been disinfected prior to use in a manner approved by the .... Government, and further, that all due precaution was taken to ensure that the packing material so disinfected was not rendered liable to contamination anew between the time of disinfection and packing."

This declaration must be signed by the Medical Officer of Health who has been appointed as supervising officer by the governments concerned.

These regulations are aimed at preventing the introduction of foot and mouth disease into the Dominions through the medium of packing materials used in the export trade, and it has been made clear by the New Zealand Government, for instance, that foot and mouth disease is unknown there and that all concerned will readily appreciate the anxiety of the Government to prevent the introduction of this disease into a country so dependent on its pastoral products.

During the year representatives of the New Zealand Government Veterinary Department visited and inspected the disinfecting process at the packing premises in Bristol, following which they expressed "great satisfaction with the efficient manner in which this process is carried out by the exporting firm and supervised by the Public Health Department."

Atmospheric Pollution.

The important work of smoke abatement was given added impetus during 1946 by the tremendous amount of attention focused on claims by citizens for a cleaner atmosphere. The Bristol Health Committee realise the need for progress in this connection and apart from local improvements they supported a country-wide campaign initiated by the National Smoke Abatement Society for the proper planning of heating schemes in post-war reconstruction.

The term " Smoke Prevention " is now being heard more and more often. This is excellent because many of the nuisances with which the Health Committee are called upon to deal could have been prevented by adequate legislation and forethought prior to the establisthment of heating methods in connection with industrial and domestic buildings. During the past year no opportunity was lost to emphasize the public health aspect of this work ; meetings of the Bristol and District Regional Smoke Abatement Council were well attended by constituent authorities in the Bristol area who are working as a team to eliminate much of the atmospheric pollution suffered in and around this City.

In addition, a meeting of the Bristol City Council Committee Chairmen, and principal officers was convened to review the problem and set administrative machinery into operation whereby the utmost possible would be done during planning and reconstruction to reduce the amount of atmospheric pollution to the minimum.

Many lines of attack were discussed including the possibility of creating a smokeless zone, district heating schemes, communal power plants for the new trading estates together with the installation of smokeless grates and other approved apparatus in the new houses and other buildings to be erected. The Health Committee appointed a deputation to wait upon the Housing and Planning and Reconstruction Committees and following a sympathetic hearing both committees gave an assurance that the points raised would be kept foremost in the minds of all responsible. Subsequently the Housing Committee came to the clear decision that approved smokeless fuel burning grates would be installed in all new houses wherever possible.

Further, in order that this matter shall not be lost sight of in the busy days of rebuilding that lie ahead, the Bristol Health Committee initiated a " Smoke Control Committee " on which members of the Planning and Housing Committees have accepted invitations to serve.

A great deal of literature was received dealing with the more satisfactory use of fuel but probably the most important was what has become known as the " Simon Report." This comprehensive survey was the result of the Fuel and Power Advisory Council's investigations. The terms of reference were as follows:—

> " To consider and advise on the use of fuels and the provision of heat services in domestic and similar premises, in the interests of the occupants and of the nation, with special regard to the efficient use of fuel resources and to the prevention of atmospheric pollution."

That coal supplies are not inexhaustible was emphasized at a London conference arranged by the Ministry of Fuel and Power on " Fuel and the Future." It is pleasing to record the demand that fuel must be used more efficiently than in the past; this will no doubt do more for smoke abatement and prevention than all the arguments ever put forward on health grounds.

The vice-chairman of the Bristol Health Committee, Alderman E. T. Cozens, accompanied by the Chief Sanitary Inspector, attended the conference of the National Smoke Abatement Society held in Brighton during October last. This conference was lively and most encouraging. Both Bristol delegates entered into the proceedings during which the progress being made in this city was set out in some detail.

Although many discussions have already been held, we have yet to find a complete answer to clean up the air of this city by the elimination of grit and excessive smoke now being emitted into the atmosphere. The department received many complaints about grit, smoke and fumes creating nuisance from such premises as gas works, bakeries, laundries, metal melting and other similar works. Action was taken in all cases and a measure of relief from nuisance secured despite labour and material shortages. One unusual complaint arose in connection with fumes from " burning off " old electric cables in the open air near residential properties. This nuisance was terminated by the removal of the process to a more suitable position outside the city boundary.

Food Inspection.

Milk and Dairies. The reduction in the number of dairies registered in the city merits comment. The total of 180 dairies registered last year has been reduced by 57 during the current year and indicates a tendency which is general throughout the country for smaller dairy businesses to be absorbed by the larger firms. This may well lead to a more uniform standard of equipment and building, although it must not be thought that the smalled concerns are not, in the main, efficiently and hygienically run.

It must be admitted however, that some degree of rationalisation of milk distribution must be to the advantage of both dairy and consumer.

Although continued shortage of labour and materials makes the work of maintenance and reconditioning of dairy premises a difficult and involved task, quite considerable improvement was achieved at 16 dairy premises.

Milk (*Special Designations*) *Regulations,* 1936-46.

Prescribed Tests for Pasteurised Milks. From the 1st March, 1946, the Minister of Health introduced two new official tests for milks which had been heat treated, including pasteurised. The Phosphatase test, which a test on whether the milk has been adequately heat treated, had been used unofficially with such good results that the Minister now made it an official test. At the same time the plate/count test, as prescribed for milks in the Milk (Special Designations) Order, 1936, was discarded and replaced by the half hour methylene blue test.

Health Departments have sufficient experience of the phosphatase test to welcome its official recognition, but it is too early yet to decide whether the change from the plate/count test to that of half hour methylene blue will be of any real value as a guide to the cleanliness and keeping quality of the milk.

Heat Treatment Regulation, 1946 (*Ice Cream*).

The Minister of Health circularised Local Authorities to the effect that he proposed to exercise the powers conferred on him under the Food and Drugs Act, 1938, and make regulations for the control of ice cream manufacture for the better protection of the public health against risk of infection. It was proposed that the regulations would come into operation on the 1st May, 1947.

In an endeavour to improve the provisions of these regulations, suggestions on the proposals were submitted to the Committee by the Medical Officer of Health as follows :—

(1) that all ice-cream or water ice mixes should be heat treated by pasteurisation immediately before freezing ;

(2) that no ice-cream should be sold other than in closed containers in any theatre or cinema or from a vehicle ;

(3) that all utensils and implements used in the preparation or sale of ice-cream or water cream should be sterilised at stated intervals ;

(4) that ice-cream should be defined, i.e. that no product shall be called ice-cream which contains less than say 8 per cent butter fat, and that any article containing less than this figure shall be termed " water ice."

(5) that no ice-cream should be sold on premises which are not registered for this purpose, subject to such safegaurds as the minister may determine in the case of premises where ice-cream is served as part of a meal.

After discussion, it was decided that representations on these lines be made to the Minister of Health so that consideration could be given to the inclusion of the suggestions outlined above in the regulations.

There is no doubt that from the opinions expressed by the Ice Cream Alliance, the ice cream manufacturers are as concerned as we are about the need for proper control over the manufacture and sale of this food product.

In Bristol the need for registration ot such premises has long been recognised ana, as far back as 1926, under a private Act all ice cream manufacturers and sellers had to be registered with the local authority. The Food and Drugs Act, 1938, made this provision apply generally throughout the country and it is hoped that the regulations to be made under that Act will have due regard to the experience of such authorities who have been operating in this manner.

Food Sampling.

Of the 2,272 samples of food and drugs collected and submitted for analysis, 110 were condemned. Those condemned included baking powder, bread and butter, cider, curry powder, iodine paint, milk, mineral water, sultanas, sausages and sausage meat.

Legal proceedings were taken in 16 cases when penalties were imposed; 14 cases are awaiting hearing; cautions were administered by the Town Clerk in 13 other cases. Four further cases of contraventions under Ministry of Food Orders were referred to that department for appropriate action.

Ministry of Food—Salvaged foods.

The Ministry of Food have several food depots in this city where they sort out all salvaged foods that may be fit for human consumption.

The supervision and control of these depots by the inspectors is extremely important and entails much of their time, as it is essential that only food fit for human consumption should be allowed to be redistributed to the trade.

Pharmacy and Poisons.

There were a further 61 premises added to the list of the local authority of persons entitled to sell Part II Poisons, bringing the total now listed to 456, all these premises being subject to routine inspection.

Food Borne Diseases.

In this group there were 149 cases of food borne infection.

Dysentery accounted for the majority, 114 cases being reported, and there was one case of typhoid and six of para-typhoid fever B. The latter were cases from outside sources.

Of the 28 cases of food poisoning, 14 were very young children and investigation did not reveal a reliable indication of the cause of the outbreak.

Prosecutions under Food and Drugs Act, 1938 (*Section* 13).

Although every effort is made to obtain hygienic conditions in food premises without recourse to prosecution, there are occasions when this action is absolutely necessary.

During the year the deputy chief inspector appeared in two such prosecutions, one being in connection with a butcher's business in the restricted yard of which were kept a dozen fowls in filthy conditions. This yard was also used for the purpose of food preparation and, in fact, one bowl of dripping awaiting use was serving as a roosting place for one of the fowls.

Photographs of the conditions and plans of the premises were used as evidence, and the defendant was fined £10.

The other case related to conditions existing at a bakery premises. Repeated visits by the district inspector were unsuccessful in getting the occupier to improve the conditions of the premises, with a result that prosecution was the only course left open to the department. In this case the magistrates imposed a fine of £20 with an additional penalty of £5 for each and every day on which the offence continued after conviction. Within three days following the court decision, this baker had so tackled his filthy premises that the change was almost unbelievable. It is difficult to understand why this man did not carry out the inspectors' advice and achieve this spectacular improvement without the necessity of first being fined.

The Clean Food Campaign.

At the beginning of the year the Medical Officer of Health drew the attention of the Bristol Health Committee to the large number of dysentery cases reported in the city during the previous twelve months. Proceeding to pay a tribute to the work of the sanitary inspectors in dealing with the hygiene of food preparing premises, at the same time he expressed the view that war conditions had created slip-shod and careless handling of food in some cases and this, in his opinion, was a contributing factor to the high incidence of dysentery. He then announced the launching of a campaign for cleaner food handling and confidently predicted that food-borne diseases could be greatly reduced by pointing out the dangers confronting the general public as a result of unclean handling of food.

With the eager co-operation of the Bristol Chamber of Commerce and the local press, meetings were then arranged with various groups of food traders and addressed by the Medical Officer of Health with the Chief Sanitary Inspector.

That these meetings and press articles had an effect was revealed by the number of requests received from the food industries for health department support to applications for licences to carry out essential repairs and cleansing, but most important of all one saw good dividends for this policy being paid by the rapid drop in food-borne disease during the year under review.

More than 500 personal letters, posters and "Wash your Hands" cards were distributed to food firms who, in addition to asking for more, requested that members of the public health staff address their employees on the importance of personal cleanliness. This aspect cannot be too strongly emphasized, as it is clear that no matter whether food premises be white-tiled from floor to ceiling, if personal cleanliness is ignored then danger exists. It is interesting to note that all Bristol Corporation departments have now placed a contract for toilet paper to be marked: "Now wash your hands, please," and it would be an excellent step forward if this could be universally adopted, particularly in all food premises.

Although appeals have been made to employers to provide sanitary conditions and to employees to observe the rules of hygiene, it should be understood that the general public must also co-operate in this matter. For that reason one was pleased to hear that a stall-holder in a market had exhibited a notice bearing these words:—

"PLEASE DO NOT SQUEEZE ME UNTIL I AM YOURS."

This notice had been exhibited in an effort to prevent people from handling lettuces and similar food-stuffs and it can be said that after observing the habits of some luke-warm purchasers the above admonition was richly deserved in the interests of public health.

Hygiene in Food Premises.

Whilst there is still an extreme shortage of labour and materials available for the improvement of food premises, much has been achieved towards raising the standard of hygiene in these premises by concentration on the technique of food handling.

It is continuously demonstrated that the proper handling of food depends much upon personnel. An example of this occurred this year when a customer of a very up to date and well run bakery brought to the department a loaf of bread in which was embedded part of a cigarette. Enquiries at the bakery revealed that everything possible was done to ensure that all the precepts of cleanliness were being observed and, in fact, the management had drawn special attention to the necessity for abstention from smoking whilst engaged on food preparation. Staff difficulties, however, make disciplinary action extremely hazardous because wherever this discipline is enforced there is every likelihood that the employee will leave. This position was so acute with the firm in question that they were negotiating for the employment of foreign labour. Nevertheless, as a result of our investigation the firm pursued the matter further with their staff and exhibited large notices in each section indicating that smoking was prohibited.

It will be noted under the heading of Food Borne Diseases in this report that there were a number of cases of food poisoning and it is emphasized that in many of these outbreaks it is the handling of food and not the condition of the premises which is the source of infection. In this connection it is vital that suitable hand-washing facilities be provided as is required under Section 13 of the Food and Drugs Act, 1938.

Legislation can ensure the provision of such facilities, but education only can ensure their proper use.

School Meals.

There are now 42 school kitchens and 186 canteens in operation in Bristol.

An important point which is receiving attention is that where ready-to-serve school meals are delivered to schools, the containers should be taken into the school and not left just inside the playground gate. The practice of leaving these meals in a yard results in a great loss of heat, as well as exposing the container to pollution by animals. It is not, of course, suggested that the food itself would be contaminated, but often the handlers of the containers would have to take part in the serving of the meals possibly before they had carried out hand washing.

Wholesale Meat Depots.

Reference was made in last year's report to the unsatisfactory conditions existing at certain wholesale meat depots. Following a series of meetings with various Ministry officials, more hygienic conditions were secured by arranging direct allocation of meat supplies from the abattoirs to retailers. This eliminated a great deal of unnecessary handling and secured the closure of certain dilapidated distributing depots in the Old Market Street area. This temporary expedient, however, does not entirely cover the requirements, because a large quantity of imported meat from Avonmouth is still distributed from the remaining Old Market Street depots. A real solution to this problem will not be found until adequate facilities are provided in conjunction with an abattoir of sufficient size.

In this connection, it is pleasing to report that as the year closed a date had been fixed by the Ministry of Town and Country Planning to hold an inquiry into the acquisition of a site at Avonmouth for a meat precinct which will incorporate adequate pasturage, lairage, slaughtering, cooling, refrigeration, and distributing facilities, a cattle market, a meat market, and sites for bacon and other meat-food factories.

This modern conception of a suitably sited centre to deal with all meat production requirements will bring credit to the city by the more hygienic handling of meat supplies and a full report of the scheme will be given in the next annual report.

Bone Taint.

Whilst this report is being prepared the country is in the grip of severe and continuous frost, and, looking back, it seems a long time since we had weather which created special difficulty for meat traders. If one thinks hard enough it will be remembered that during July, 1946, we were visited by a few days of very hot weather. Just around this time many complaints were received about bone-taint, a condition which is brought about by putrefactive changes near the bone due to the retention of body heat in the thickest parts of the carcase for a sufficiently long period to produce a tainted condition of the meat.

It is normal for meat to be hung for a certain time to allow body heat to dissipate before refrigeration, but during the particularly warm and humid spell referred to insufficient time had been allowed for this to take place.

Every effort was made by trimming to save as much meat as possible, and advice given to meat traders prevented the continuance of this unusual wastage in home killed meat.

Noxious Weeds.

The Health Department received twenty-three complaints of weedy land during the year and although the law dealing with this problem is not too clear and well defined, the majority of cases were satisfactorily dealt with by the sanitary inspectors who visited the land complained of and requested occupiers to cut down and destroy the weeds.

It is most disappointing to owners of gardens and allotments to find their small seedlings over-ridden with thistles and other weeds, wind-blown from adjacent neglected land. Difficulties have arisen owing to labour shortage and in some cases weeds have seeded before clearance action was taken, but special effort was made to deal with all cases because of the present food shortage.

From a public health point of view it is interesting to recall the words of a former Minister of Food, who said: "The vegetable garden is also our national medicine chest—it yields a large proportion of the vitamins which protect us from infection."

City Water Supply.

Particulars required by Ministry of Health Circular 13/47, dated 13th March, 1947:—

	REMARKS.
1. Whether the water supply of the area and its several parts has been satisfactory (*a*) in quality, (*b*) in quantity?	YES.
2. Where there is a piped supply, whether bacteriological examinations were made of the raw water and, where treatment is installed, of the water going into supply; if so, how many and the results obtained; the results of any chemical analysis.	Raw waters examined bacteriologically before treatment by Bristol Water Works Co. Raw water at Barrow before filtration—weekly. Raw water at Chelvey before chlorination—twice weekly. Raw water at Litton before chlorination—monthly. After treatment found satisfactory.
3. Where the waters are liable to have plumbo-solvent action, the facts as to contamination by lead, including precautions taken and number and result of analysis.	NOT LIABLE. Most recent analysis 18th March, 1947, from cold water tap in laboratory. Lead—0.05 part per million.
4. Action in respect of any form of contamination.	On finding any trace of faecal pollution the matter is taken up with the appropriate authority immediately, when further samples are taken until satisfactory result is obtained. Contamination after treatment has been negligible.
5. Particulars of the proportion of dwelling houses and the proportion of the population supplied from public water mains (*a*) direct to houses, (*b*) by means of standpipes.	(*a*) The whole of the population in the Bristol area is supplied by public water mains direct to houses, with the exception of a few isolated premises in the rural suburbs, when the supply is free from private wells and subject to a form of chlorination. These have been considerably reduced since last report, main supply now having been laid on. (*b*) Negligible.

Public Health Training Courses.

Last year we referred to the possibility of a special training scheme for future sanitary inspectors. This was placed before the Health Committee in October this year, when the deputy chief sanitary inspector outlined the scheme that had been drawn up by the Sanitary Inspectors' Association in collaboration with the Ministries of Health, Education, Labour and National Service.

This scheme received the full support of the Health Committee and commenced at the Merchant Venturers' Technical College in November, when 26 former members of H.M. Forces, whose educational training had been interrupted by their war service, were admitted to this course.

These candidates first had to pass through a selection board consisting of an educationalist, medical officer of health, sanitary inspector, appointments officer of the Ministry of Labour, with a chairman possessing wide local government experience.

The course of instruction for selected students is divided into three sections and is designed to completely cover the whole of the Examining Board's existing syllabus and regulations. Section one refers to preliminary training and includes mathematics, chemistry, physics, biology, building science, building construction and general hygiene and sanitation, and covers a period of three months.

Section two follows on for a further six months' duration and deals fully with the theory and practice of sanitary inspection, including such subjects as statutes and orders, inspection and administration, water, food, air ventilation, warming and lighting, building construction and sanitation, drainage, sewerage and sewage disposal, collection and disposal of refuse, prevention of infectious disease, flies, pests and vermin, statistics and office routine.

Section three, which also covers six months, is concerned mainly with practical training and involves the placing of students with local authorities apart from Bristol itself, and the co-operation of 30 other authorities will be necessary. Thus each student will have three months' training in County Borough Authorities, a month with an Urban District, and two months with a Rural District Authority.

It will be noted that this training course, which is full time, covers a period of 15 months, after completion of which the candidates will, of course, have to sit for the qualifying examination of the board.

Every endeavour has been made to ensure that specialists lecture on their respective subjects and, with the help of the Health Committee, this has been arranged so as not to involve the obtaining of additional staff. It will be appreciated that the Town Clerk's, City Engineer's, Public Analyst's, and Transport and Cleansing Departments are all contributing their quota of lectures to the course, without whose co-operation it would have been necessary to appoint additional staff. Furthermore, the Merchant Venturers' Technical College undertake themselves a great deal of the general instruction.

The Ministries concerned are extremely anxious that these courses should be run in centres like Bristol as they serve two purposes: firstly in assisting former members of H.M. Forces to be rehabilitated, and secondly, providing trained officers to help meet the existing very large shortage of sanitary inspectors.

In addition to the above, the extent of the present training work will be seen when it is realised that the same lecturers as those dealing with the full time course take part in the courses outlined below dealing with the environmental side of public health, the great bulk of this work being dealt with outside office hours.

Meat & Other Food Inspectors' Course ...	Bristol University
Certificate in Public Health	do.
Diploma in Public Health	do.
Fifth Year Medical Students	do.
Part Time Sanitary Inspectors' Class ...	Merchant Venturers' Technical College
Butchers' Revision Class	do.
Science of Meat Course	do.

Planning and Reconstruction.

Perusal of the foregoing will have revealed that there is much that requires the constant attention of the Public Health Department to ensure that minimum standards are continued, but at the same time the insistent demand of the Health Committee that only the best possible conditions that can be obtained under present circumstances must be accepted, shows that the will is present even if labour and materials are in short supply.

The officers of the Public Health Department welcome enquiries, suggestions and complaints which will lead to the improvement of any unsatisfactory conditions, and it is to be hoped that this will lead in time to skies which are free from smoke, air that is sweet and clean, safe and wholesome food supplies, and homes that are labour saving, warm and properly equipped with sanitary and other adequate amenities.

These basic necessities of civilisation and healthy living are being more satisfactorily arranged by close co-operation between various Ministerial and Civic Departments, even though the ultimate objective of the well-planned city may sometimes appear to be overshadowed by present problems.

Port Health.

Particulars of the port health inspectorial work are included in the report of the chief assistant port medical officer—Appendix I.

Appendix III.

THE REPORT OF THE PUBLIC ANALYST, OFFICIAL AGRICULTURAL ANALYST AND GAS EXAMINER.

By Mr. E. G. WHITTLE, Deputy Public Analyst.

Public Analyst—Francis Edwin Needs, F.R.I.C. (Died October, 1946)
Deputy Public Analyst—Ernest George Whittle, B.Sc., (Lond.), F.R.I.C.
Assistant Analysts—Senior: Ivor Dembrey, B.Sc., (Bristol), F.R.I.C.
John Smyth, B.Sc., (Bristol).
Chlorination Officer—Ralph C. M. Putnam.

In October this laboratory suffered a grievous loss in the death of Mr. F. E. Needs, the Public Analyst. This loss seriously disturbed the even working of the Department but thanks to the willing co-operation of a loyal staff all leeway has been made up and the work well maintained.

The successful working of the scheme of merging chemical bacteriological and pathological services is apparent with the succeeding years since the inauguration of the scheme in 1934 and the co-operation between the Corporation and University continues to work well to the mutual advantage of both bodies.

The report has been divided into eight subdivisions as under:—

Part I	Food and Drugs Act.
Part II	Pharmacy and Poisons Act.
Part III	Fertilisers and Feeding Stuffs Act.
Part IV	Waters and Sewage Chlorination.
Part V	Rag Flock Act.
Part VI	Miscellaneous Analyses.
Part VII	Gas Regulation Act.
Part VIII	Atmospheric Pollution.

Attention is particularly directed to the increasing variety of samples submitted in Part VI of the report and covers articles examined for infestation, blood and urine submitted for lead determinations and a large number of examinations of dried milk showing marked depreciation as a result of long storage during war years.

New legislation continues to create increasing and detailed examinations. In particular the new Labelling of Food Order is likely to lead to much more attention being directed to examinations for vitamins. This Department has certain chemical methods under review but it is anticipated that new apparatus will be required to carry out estimations for vitamin A. Vitamin B has been studied in some detail and a useful method evolved. Examination for vitamin C is already a well established procedure but vitamin D determinations are largely biological and the laboratory is not equipped for bioassays.

The determinations made in connection with Atmospheric Pollution form a prominent part of the work and four stations are now established and the information should prove useful in the future in the drive for more adequate control of smoke in the City.

The care of the three official recording calorimeters under the Gas Regulation Act entails a considerable amount of work and has helped to make the year a very busy one.

New legislation is pending under the Rag Flock Acts and the inadequacy of control by use of the chloride estimation alone has long been recognised and more stringent tests of cleanliness are now proposed.

The large mass of work carried out by the Department would have been impossible without whole hearted co-operation of members of the staff and I acknowledge with gratitude their enthusiastic and willing service.

SUMMARY OF SAMPLES.

Table 1.

Food and Drugs Act	2272
Water for chemical analysis	217
Fertilisers and Feeding Stuffs Act ...	11
Rag Flock Act	13
Gas Undertakings Acts	624
Atmospheric Pollution	48
Miscellaneous	335
Health Department (C.S.I.)	12
Pharmacy and Poisons Act ...	4
Total ...	3536

Part I.

FOOD AND DRUGS ACT.

During the year, 2272 samples were submitted for analysis under the Food and Drugs Act, 1938. This number is 81 less than for the previous year and represents a decrease of 3.4 per cent.

Table 2 shows the nature and number of samples submitted, with the number reported genuine and the number adulterated.

Table 2.

Nature of sample.	Number examined.	Number genuine.	Number adulterated
Milk	1528	1439	89
Butter	124	124	0
Margarine	116	116	0
Lard	53	53	0
Cheese	17	17	0
Cooking Fat	56	56	0
Tea	16	16	0
Cocoa	15	15	0
Coffee and Coffee Essence	23	23	0
Gelatine Powder	13	13	0
Ice Cream	17	17	0
Dried Fruit	13	11	2
Baking Powder	16	15	1
Golden Raising Powder	15	15	0
Table Cream	1	1	0
Bread and Butter	1	0	1
Sausages and Sausage Meat ...	17	7	10
Meat and Fish Paste	12	12	0
Vitamin Capsules	2	2	0
Saccharin Tablets	4	4	0
Vinegar	15	15	0
Pepper and Pepper Compound ...	13	13	0
Salad Cream	2	2	0
Curry Powder	15	13	2
Pickles and Sauce	20	20	0
Mustard and Mustard Compound ...	4	2	2
Ginger Beer	1	0	1
Cider	16	15	1
Beer	8	8	0
Sherry	1	1	0
Sugars	25	25	0
Starchy Foods	52	52	0
Drugs	41	40	1
Total ...	2272	2162	110

Adulteration rate of all samples, 4.84%.

Number of samples examined ...	2272
,, ,, ,, adulterated ...	110
,, ,, genuine ...	2162

Of the 2272 samples examined, 416 were sealed (having been divided in accordance with the provisions of section seventy of the Food and Drugs Act, 1938), and 1856 were unsealed or informal samples.

More than three-quarters of the number of samples were informal, but the saving of time and trouble involved in the collection of these samples, applies only to the method of sampling.

It has been previously pointed out that the amount of analytical work carried out on informal samples is at least equal to, and in a considerable number of cases, much greater than that done on formal samples, chiefly on account of the fact that a larger quantity of the sample is available for an extensive examination.

Comparative figures for adulteration in Bristol for the last five years are given in Table 3.

Table 3.

	1942	1943	1944	1945	1946
Total number of samples ...	1596	1479	1996	2353	2272
Milk, per cent. adulterated ...	3.63	4.65	2.78	5.54	5.82
Foods (other than milk) per cent adulterated ...	4.63	4.50	5.84	4.33	2.56
Drugs, per cent. adulterated ...	0	11.11	0	5.26	2.84
Total per cent. adulterated ...	3.83	4.80	3.46	5.18	4.84

Milk.

Of the 89 samples condemned, one contained added water and was also deficient in fat.

Thirty-eight samples gave evidence of the addition of water, and 50 were deficient in fat.

The figures of analysis for the samples condemned for double adulteration are as follows:—

	No. Y. 74.
Fat	2.15%
Non-fatty Solids ...	6.53%
Specific Gravity ...	.1024.5
Freezing Point Depression °C. ...	0.418
Result	23.1% Added water. 6.6% Deficient in fat.

Table 4 gives the figures for samples containing added water.

Table 4.

Number of sample.	ANALYTICAL DATA			Result.
	Fat.	Non-fatty solids.	Freezing point depression °C.	
V. 69	3.05	7.15	.432	15.8% Added Water.
V. 70	2.95	7.50	.463	11.7% ,, ,,
V. 71	3.46	8.24	.507	3% ,, ,,
V. 72	3.45	8.00	.482	5.8% ,, ,,
V. 89	3.30	7.68	.475	9.6% ,, ,,
V. 90	2.73	6.97	.432	18% ,, ,,
V. 91	2.40	6.77	.427	20.3% ,, ,,
V. 92	3.20	7.85	.491	7.6% ,, ,,
V. 134	3.50	8.24	.518	3% ,, ,,
V. 135	4.48	7.72	.482	9.1% ,, ,,
V. 153	3.06	7.90	.486	7% ,, ,,
V. 154	3.80	7.75	.477	8.8% ,, ,,
V. 241	11.40	7.95	.515	6.4% ,, ,,
W. 52	3.20	8.15	.524	4.1% ,, ,,
W. 128	3.50	7.90	.447	7% ,, ,,
W. 129	4.90	7.25	.408	14.7% ,, ,,
W. 130	3.46	7.50	.423	11.7% ,, ,,
W. 131	3.75	7.25	.405	14.7% ,, ,,
W. 132	5.27	7.50	.439	11.7% ,, ,,
W. 149	8.25	8.00	.471	5.8% ,, ,,
W. 151	6.10	8.27	.480	2.7% ,, ,,
W. 215	4.20	7.40	.432	12.9% ,, ,,
W. 216	5.25	7.90	.449	7.0% ,, ,,
Y. 7	3.20	6.90	.425	18.8% ,, ,,
Y. 8	3.35	8.40	.491	1.1% ,, ,,
Y. 15	3.30	7.22	.448	15% ,, ,,
Y. 16	3.05	7.25	.455	14.7% ,, ,,
Y. 28	3.60	7.82	.467	8% ,, ,,
Y. 29	3.68	8.04	.486	5.4% ,, ,,
Y. 51	3.24	7.16	.446	15.7% ,, ,,
Y. 52	2.85	6.92	.432	18.5% ,, ,,
Y. 60	3.08	7.02	.459	17.4% ,, ,,
Y. 61	2.57	7.23	.476	14.9% ,, ,,
Y. 72	2.92	7.28	.454	14.3% ,, ,,
Y. 73	2.55	6.40	.406	24.7% ,, ,,
Y. 81	2.15	5.30	.315	37.6% ,, ,,
Y. 304	3.20	7.90	.488	7.0% ,, ,,
Z. 221	3.15	7.72	.478	9.1% ,, ,,

In all of these cases of double adulteration and watered samples the alleged added water as obtained from the Board of Agriculture standard was well confirmed by the freezing point depression. Each case was referred back to the source, yielding samples which gave normal figures for non-fatty solids, and freezing point depression larger than .530.

About half of these watered samples were taken informally, and the fact that formal samples collected a few days later gave evidence of the same degree of adulteration with water, shows that the adulteration must have been fairly systematic.

Of the 50 samples which were deficient in fat, 30 samples showed a deficiency of (or greater than) 10 per cent. and 6 samples were deficient in fat to the extent of 20 per cent. or more.

Thirty-five samples were informal milks, aand in most cases when mixed with other informal genuine samples to form one consignment the mixture satisfied the minimum amount of 3 per cent. of fat.

The second quarter of the year yielded the greatest number of samples condemned for fat deficiency, while the first quarter contained most of the cases of added water. The following table shows the number condemned for fat deficiency for each quarter of the year, compared with those condemned for added water.

Table 5.

	Samples of milk condemned for: deficiency in fat.	added water
1st quarter ...	6	26
2nd ,, ...	24	7
3rd ,, ...	17	2
4th ,, ...	3	3
Total ...	50	38

Abnormal Milk. Low non-fatty solids.

Table 6.

Number of sample	Specific gravity.	Fat.	Non-fatty solids.	Freezing point depression °C.
V. 5	1029.4	4.10	8.30	.542
*V. 99	1030.6	3.09	8.43	.539
V. 184	1030.1	3.50	8.40	.539
V. 264	1029.4	3.75	8.40	.545
V. 445	1030.3	2.90	8.30	.540
V. 446	1030.8	2.95	8.45	.544
V. 448	1030.4	3.35	8.45	.544
V. 460	1030.1	3.70	8.40	.541
V. 545	1029.6	4.20	8.40	.544
V. 546	1030.2	3.95	8.45	.541
W. 43	1029.7	4.40	8.45	.541
W. 49	1029.9	3.50	8.30	.536
W. 50	1030.4	3.30	8.40	.531
W. 51	1029.5	3.40	8.20	.533
W. 57	1029.8	3.10	8.30	.536
W. 167	1029.8	3.00	8.40	.536
W. 184	1029.8	3.55	8.35	.532
W. 191	1029.7	3.85	8.45	.540
Y. 59	1030.3	3.30	8.45	.538
Y. 69	1030.0	3.00	8.20	.544
Y. 70	1030.3	3.20	8.40	.547
Y. 86	1030.1	3.20	8.40	.546
Z. 116	1030.8	3.00	8.40	.536
Z. 118	1030.6	2.95	8.35	.540
Z. 119	1030.8	3.00	8.45	.539
Z. 208	1029.6	3.50	8.40	.553
Z. 275	1029.4	3.10	8.30	.536
Z. 278	1028.5	3.95	8.05	.535
Z. 347	1029.4	4.30	8.35	.547

* " Appeal to cow " sample.

All the samples, despite the figure for non-fatty solids being slightly below the presumptive standard of the Board of Agriculture, were returned as genuine without question. This shows the immense value that the freezing point determination is to the producer as well as to the analyst.

" Appeal to cow " samples.

Thirty-four samples of milk were collected by inspectors of Food and Drugs at the farm. These samples were milked in the presence of the inspectors, and all precautions were taken regarding the use of dry clean milking cans, dry churns, no leaking coolers and the milk well plunged. In four cases the fat was below 3.0% but usually the mixture of 2 or 3 churns which formed one consignment brought the fat up to 3% or more.

In one case, the non-fatty solids were slightly below 8.5% but the freezing point was perfectly normal.

Suspicious.

Table 7.

Number of sample.	Fat %	Non-fatty solids %	Total Solids %	Freezing point depression °C.
W. 113	2.95	8.55	11.50	.512
W. 115	2.85	8.35	11.20	.512
W. 116	2.95	8.50	11.45	.521
Z. 276	2.90	8.15	11.05	.518

Twenty-six samples of milk were reported as suspicious, due to slight deficiencies of fat or very small amounts of water. Of this number four were less than three per cent. of fat and gave freezing point depressions which suggested an addition of water as well. The figures of analysis for these, are given in the above table.

Table 8.

Average composition of genuine milk for the year 1946.

Month	Number for each month	Specific gravity	Fat %	Non-fatty solids %
January ...	171	1031.8	3.85	8.87
February ...	99	1031.7	3.74	8.81
March ...	130	1031.7	3.69	8.83
April ...	79	1031.4	3.57	8.72
May ...	129	1031.8	3.56	8.82
June ...	101	1031.6	3.77	8.82
July ...	108	1031.2	3.65	8.70
August ...	77	1031.3	3.76	8.73
September ...	123	1031.5	3.74	8.78
October ...	167	1031.7	3.80	8.83
November ...	103	1031.8	3.86	8.86
December ...	97	1031.6	4.14	8.87
Average for year	1384 (total)	1031.6	3.76	8.81

This table does not include suspicious or abnormal samples.

The average figures for all samples of milk examined during the year were as follows :—

Specific gravity ...	1031.5
Fat	3.71%
Non-fatty solids ...	8.79%

A large number of samples of milk were taken direct from farms, and although these are primarily submitted for the detection of tubercle bacillus, yet the figures of analysis give a very good guide as to the type of milk entering the city.

Freezing Point of Milk.

The Hortvet apparatus has been in constant use this year and has proved invaluable in differentiating between abnormal and suspicious samples, besides confirming beyond all doubt those samples adulterated by the addition of water.

One hundred and fifty determinations of the freezing point in the Hortvet apparatus were done on samples of milk during 1946. The average freezing point depression for genuine samples (i.e. excluding those reported as adulterated and suspicious) for the year was 0.541.

It is the practice in all cases of adulterated milk to follow up the sample to the source, and on comparing the figures for non-fatty solids and freezing point depression of the watered sample with those of the genuine sample collected a few days later, it is remarkable how close is the agreement of the amount of added water as calculated from the original non-fatty solids and the original freezing point depression.

Adulterated samples other than milks.

Table 9.

Number of sample.		Nature of sample.	Result of Analysis.
V.D.	97	Baking Powder	Deficient in available carbon dioxide to the extent of 40%.
V.D.	122	Pork Sausages	Deficient in meat to the extent of 18.5%
V.D.	125	Pork Sausages	Contained undeclared sulphur dioxide preservative equivalent to 60 parts per million of SO2.
V.D.	126	Beef Sausages	Deficient in meat to the extent of 10.5%
V.D.	131	Curry Powder	Contained 25% of Salt (NaCl).
V.D.	132	Curry Powder	Contained 33 parts per million of Lead.
W.D.	90	Cider	Contained 100 parts per million of sulphur dioxide in excess of the amount permitted.
X.D.	42	Iodine Paint	Deficient in Iodine and Boric Acid to the extent of 12% and 70% respectively.
Y.D.	20	Pork Sausages	Deficient in meat to the extent of 48%
Y.D.	21	Pork Sausage Meat	Deficient in meat to the extent of 37.9%
Y.D.	22	Pork Sausages	Deficient in meat to the extent of 28.8%
Y.D.	31	Mustard	Deficient in allyl isothiocyanate to the extent of 65.7%.
Y.D.	33	Beef Sausages	Deficient in meat to the extent of 50.4%
Y.D.	34	Pork Sausage Meat	Deficient in meat to the extent of 4%.
Y.D.	48	Mustard	Deficient in allyl isothiocyanate to the extent of 91.4%.
Y.D.	56	Sultanas	Contained 150 parts per million of sulphur dioxide in excess of the amount permitted.
Y.D.	58	Sultanas	Contained 100 ,, ,, ,,
Y.D.	115	Bread and Butter	Sample of bread and margarine.
Y.D.	116	Ginger Beer	Deficient in crystalline citric acid to the extent of 28% and in sugar to the extent of 23.3%.
Y.D.	133	Pork Sausages	Deficient in meat to the extent of 24%.
Y.D.	147	Beef Sausages	Deficient in meat to the extent of 32%.

Table Cream.

The sample consisted of two packets. The first packet contained a flavoured powder which on microscopical examination proved to be wheaten starch with a little yellow colouring matter. Protein 8.7%.

The second packet contained jelly base i.e. gelatine crystals, without admixture of sugar. Protein 83.3%.

When cooked according to directions it yielded an appetising "sweet" of a jelly-blanc mange nature.

The label stated clearly that there was no milk or cream present. Therefore, the word "cream" in Table Cream could hardly be calculated to mislead.

Ice Cream.

Seventeen samples submitted under this heading were examined, and all were returned as genuine. Six samples contained 8% or more of fat, the remainder containing only a mean percentage of 1.4% of fat, hence only 6 samples would have passed the standard recommended by the Ice Cream Manufacturers' Association of Great Britain and Ireland some yeare ago, i.e. a frozen product containing not less than 8% milk fat. Eight samples contained starch and were little more than frozen custard powder emulsion. Metals and preservatives were not detected.

Fatty substances.

The following samples were examined. With the exception of one sample of bread and butter, all were reported as genuine.

124	samples of	butter
1	,,	bread and butter
116	,,	margarine
17	,,	cheese
53	,,	lard
56	,,	cooking fat

The sample of bread and butter was proved on analysis to be bread and margarine.

The Reichert figure on the samples of butter varied between 24.2 and 32.6 giving a mean of 28.6. The mean moisture figure was 13.6%.

All the samples of margarine were based on a coconut or palm kernel oil constituent. Butter fat was well below 10% in all cases. The following are the mean analytical figures.

Moisture ...	14.2%
Valenta ...	62.4
Zeiss ...	45.1
Polenske ...	4.1
Reichert ...	4.4

Boric acid preservative did not exceed the amount permitted in any case.

The fat content of the samples of cheese varied between 30.9% and 52.6% giving a mean figure of 39.7%. The average amount of moisture was 27.2% and the mean Reichert figure was 28.

All of the samples of lard were genuine and consisted of 100% hog's fat. The mean figures of the analysis were as follows:—Zeiss at 40°C. 51, Valenta test 85°C., Iodine No. 65, Melting Point 40.3°C., Melting point of crystals from ether 63°C.

All of the samples of cooking fat consisted of 100% fat. Since cooking fats are generally used as a substitute for lard, one would expect them to contain no moisture at all, and that is usually found to be the case. The mean figures for the 56 samples of cooking fat were:—Zeiss at 40°C. 50.4, Valenta test 80°C., Iodine Value 62.7, and melting point 40.7°C.

Starchy Foods.

Fifty-two samples were submitted under this heading and all reported as genuine.

The following table gives the figures of analysis.

Table 10.

Description	No. of samples	Moisture % average	Ash % average	Protein % average	Starch
Flour (plain) ...	5	12.95	0.74	13.16	Wheat
Flour (self-raising) ...	5	11.82	2.38	13.50	Wheat
Oatmeal	8	8.71	1.93	12.98	Oat
Sponge Mixture ...	10	11.60	4.41	12.34	Wheat
Semolina	15	12.44	0.81	13.29	Wheat
Pearl Barley ...	4	13.30	1.42	7.20	Barley
Custard Powder ...	1	12.10	2.15	17.92	Wheat
Bun and Cake Flour ...	2	9.30	9.50	8.10	Wheat and Rye
Cornflour	2	——	——	——	Maize

Sugars.

Twenty-five samples of sugar were examined, consisting of the following varieties.

Description	No. of samples
Jam	8
Sugar	17

The samples of jam satisfied the preservative regulations.

The soluble solids ranged from 68.8 to 74.9 per cent. as obtained from the immersion refractometer, giving an average figure of 71.4 per cent., which is well above the standard of the Food Manufacturers' Federation, i.e. 68.5 per cent.

The fruit content as obtained from the insoluble solids exceeded the amount guaranteed in all cases.

Seventeen samples of sugar were examined and contained 99 to 100 per cent. sucrose with very little ash and moisture and no trace of tin.

Sausage and Sausage Meat.

Seventeen samples were submitted, ten of which were condemned. Of these nine were deficient in meat content, while the other had an excess of sulphur dioxide preservative.

Baking Powder.

Sixteen samples of Baking Powder were examined, one of which was adulterated on account of deficiency in available carbon dioxide.

The figures for the other 15 samples were as follows.

Table 11.

Number of sample	Total CO_2	Available CO_2	Ash %	P_2O_5
V.D. 5	15.20	15.00	44.0	Positive
V.D. 6	12.60	12.00	41.8	,,
V.D. 7	11.80	11.50	43.1	,,
V.D. 8	8.30	8.00	43.1	,,
V.D. 95	11.20	10.80	—	,,
V.D. 96	16.30	15.90	—	,,
V.D. 98	9.60	8.90	—	,,
W.D. 64	10.10	9.20	15.0	,,
W.D. 65	14.90	14.40	43.6	,,
W.D. 66	14.60	14.30	52.5	,,
W.D. 67	14.80	13.90	48.1	,,
Z.D. 141	8.24	7.62	40.1	,,
Z.D. 142	18.74	17.93	36.1	,,
Z.D. 143	11.34	10.95	18.1	,,
Z.D. 144	10.50	9.82	40.1	,,

Tea.

Sixteen samples were examined. They all gave typical microscopical appearances and were genuine.

The mean analytical figures were as follows.

	%
Moisture	7.24
Total Ash	5.63
Soluble Ash	3.55
Alkalinity of Soluble Ash (as K_2O)	1.51
Silica	0.20

Golden Raising Powder.

Fifteen samples of Golden Raising Powder were examined, all of which were genuine.

The mean figures of analysis are appended.

Number of samples	Total CO_2	Available CO_2	Ash %
15	11.31	10.60	36.70

Meat and Fish Paste.

Twelve of these samples were examined—six of meat and six of fish.

All satisfied the regulations controlling this particular commodity and were therefore reported as genuine.

The mean figures of the analysis are as follows.

Table 12.

	Total Meat or Fish %	H_2O %	Fat %	Protein %
Meat Paste ...	63.8	15.19	8.80	13.30
Fish Paste ...	69.7	63.51	8.97	14.75

Saccharin Tablets.

Four samples were examined and all contained the amount declared of 0.2 grain of saccharin.

Coffee.

Fifteen samples of Coffee and one of Coffee and Chicory were examined. The average specific gravity of a 10% decoction of the samples of coffee was 1009.2.

The sample of Coffee and Chicory gave a specific gravity figure of 1020.7 for a 10% decoction.

Microscope. Typical structures in each case.

Coffee and Chicory Essence.

Seven samples were examined giving the following figures.

Table 13.

Number of sample	H_2O %	Ash %	Caffeine %	Coffee %	Chicory %
W.D. 49	54.06	0.70	0.26	20.8	——
W.D. 50	70.11	1.56	0.30	24.0	9.4
W.D. 51	47.94	2.38	0.32	25.6	25.7
W.D. 135	49.48	2.33	0.28	22.0	27.0
W.D. 136	64.06	1.50	0.29	23.0	10.0
W.D. 137	54.78	1.24	0.23	18.0	9.0
W.D. 138	48.75	0.98	0.25	20.0	3.0

In two cases, preservative (Benzoic Acid) was declared. In both, the amounts were below the limit laid down in the Preservative Regulations.

Cocoa.

Fifteen samples of cocoa were submitted, giving the following mean analytical figures.

Table 14.

	%
Moisture	7.16
Ash	6.14
Insoluble Ash	1.49
Alkalinity as K_2O	2.05
Fat	22.72
Zeiss reading at 40°C. ...	46.50
Cold water extract	26.85
Ash of cold water extract (both expressed at percentage of dry fat-free substance) ...	6.91

No foreign starch and no arsenic was detected in any of the samples.

Pepper and Pepper Compound.

Thirteen samples were examined, one of which was compound. The average figures for pepper were as follows.

	%
Moisture ...	10.05
Ash	3.95
Soluble Ash ...	2.24
Silica	0.49

The highest amount of silica found was 1.31%. All the samples showed the usual microscopical appearances and were genuine.

The pepper compound gave the following figures: Moisture 11.94%, Ash 1.61%, Soluble Ash 0.89%, Silica 0.02%. Microscope. Pepper and wheaten starch.

Vinegar.

All the fifteen samples of vinegar submitted were genuine.

The mean figures for malt and artificial vinegar are given below.

Table 15.

	Malt	Artificial
Specific Gravity	1012.1	1008.3
Total Solids %	1.53	0.22
Ash %	0.17	0.06
Acetic Acid %	4.25	4.78

Arsenic was well below the limit in all cases.

Gelatine Powder.

Thirteen samples were examined and reported as genuine although two samples contained 100 parts per million of Zinc, which is the limit suggested by the Society of Public Analysts. Arsenic, lead and copper were within accepted limits.

Mustard and Mustard Compound.

Two samples of mustard, one mustard compound and one liquid mustard were examined.

The two samples of mustard were deficient in allyl isothiocyanate and were condemned.

The other two samples were genuine.

Beer.

Eight samples of beer were examined and all were genuine. Some of the figures obtained are given in the following table.

Table 16.

No.	Z.D.36	Z.D.37	Z.D.38	Z.D.39	Z.D.75	Z.D.76	Z.D.77	Z.D.78
Original gravity	1008.2	1005.5	1005.6	1005.6	1006.8	1005.9	1006.9	1004.9
Alcohol by weight %	3.14	3.84	2.62	2.62	2.23	2.23	2.28	2.34
Proof spirit %	6.86	8.38	5.73	5.73	4.85	4.85	4.98	5.10
Acidity as Acetic Acid %	0.11	0.15	0.20	0.18	0.09	0.11	0.13	0.16

No sample gave more than 1.2 parts per million of lead, and no arsenic was detected. Sulphur dioxide was detected in seven samples but the amount was within the limit of 70 parts per million.

Cider.

Sixteen samples were examined, one of which contained an excess of sulphur dioxide preservative. Only small amounts of lead and copper were found.

Some of the mean analytical figures are given.

Table 17.

	%
Alcohol by weight	3.1
Proof Spirit	6.68
Fixed acidity as Malic Acid ...	0.16
Volatile acidity as Acetic Acid	0.32

Curry Powder.

Table 18.

No.	% NaCl	Lead p.p.m.	As p.p.m.
Y.D. 5	0.47	2.0	nil
Y.D. 6	5.50	4.7	nil
Y.D. 7	6.61	2.0	nil
Y.D. 8	0.59	5.2	nil
V.D. 57	4.39	10.	nil
V.D. 58	3.88	12.5	nil
V.D. 59	8.12	4	nil
V.D. 75	0.52	16	—
V.D. 76	1.08	12	—
V.D. 77	0.50	8	—
V.D. 78	2.16	nil	—
V.D. 129	0.53	17	nil
V.D. 130	1.07	19	0.5
V.D. 131	25.4	16	nil
V.D. 132	4.9	33	nil

This table shows the results obtained upon examination of 15 samples of curry powder taken during the year 1946.

The following observations are made:—

A. Concerning the lead content.

1. There is no reason why curry powders should contain any lead.
2. In 1940 the Madras Government at the request of importers in this country agreed to provide a certificate to curry powders containing less than 5 parts of lead per million.
3. In 1940 a vendor in the County of Kent was fined 40s. and £5 5s. costs for a powder reported as containing 23 parts per million of lead.
4. In 1942 in the City of Salford a retailer's stock was surrendered for destruction and the packers asked to exercise greater control over the quality of the ingredients used. The sample in this instance contained 40 parts per million of lead attributed to the use of lead chromate to improve the appearance of the turmeric root in the powder.
5. It is therefore suggested that in future action be taken in samples found to contain more than 20 parts per million of lead and in due course it is hoped that this tentative limit can be reduced further to 5 parts per million. Further action was taken regarding V.D. 132.

B. Concerning the salt content.

1. It will be noted from the table that 14 of the samples show a salt content of less than 10%.
2. In 1944 a manufacturer and two tradesmen at Westminster were summoned for selling "Genuine Indian Curry Powder" containing 24% salt. The Public Analyst suggested that 10% salt was a reasonable limiting amount. The manufacturer was fined £10 and £15 15s. costs. No order was made against the tradesmen.
3. It is suggested that 10% of salt is a reasonable quantity and in consequence further action was taken regarding V.D. 131.

Pickles and Sauce.

Twenty samples were examined for the presence of Benzoic Acid preservative, with negative results in all cases.

Wines.

One sample of sherry was examined, giving the following figures.

Alcohol by weight ...	14.6
=	31.4 Proof Spirit
Acidity as tartaric acid	0.64
Total solids ...	8.4
Ash	0.2

Methyl alcohol, isopropyl alcohol, aldehydes and arsenic were absent. The lead content was 0.8 parts per million.

Salad Cream.

Two samples of salad cream were examined and found to conform to the Food Standards for salad cream in respect of edible oil and egg yolk.

Non-alcoholic drinks.

One sample of mineral water was submitted, which satisfied the preservative regulations, but was deficient in both crystalline citric acid and sugar.

Drugs.

The forty-one specimens of drugs consisted of the following.

Table 19.

Bicarbonate of soda	5	Epsom salts ...	8
Boric ointment ...	12	Glauber salts ...	4
Zinc ointment ...	8	Iodine	4

With the exception of one sample of iodine, all of these drugs complied with the requirements of the British Pharmacopoeia, 1932.

Vitamin Tablets and Capsules.

Two samples were examined.

	Y.D. 113 Vitamin B.1. Tablets	Y.D. 114 Vitamin Capsules
	International units per tablet or capsule	
Vitamin A		2,500
Vitamin B.1.	920	47
Vitamin C		102

Preservatives and colouring matter.

No evidence of preservative was found in milk or butter during the year. Considering that more than fifteen hundred samples of milk were examined, it is very satisfactory to be able to report that not one sample contained formaldehyde, boric acid, or artificial colouring matter.

All the samples conformed to the Preservative regulations with the exception of two samples of dried fruit, one cider and one of sausages which contained an excess of sulphur dioxide.

The following table shows the number of samples which contained sulphur dioxide, with the highest amount found and the limit allowed.

Table 20.

Nature of sample	No. of samples	Highest estimation	Limit allowed
		Parts per million	
Gelatine Powder ...	4	496	1000
Sausages	3	326	450
Cider	13	138	200
Dried Fruit (b) ...	6	42	750
Beer	7	70	70
Jam	6	19	100

Benzoic acid was present in two samples of Coffee and Chicory Essence, but in both cases the amount was within the limit allowed.

Part II.

PHARMACY AND POISONS ACT.

Four samples were examined under this act. Two of the samples were disinfectants, neither being poisons within the meaning of the Pharmacy and Poisons Act.

The other two samples were solutions of ammonia and since both contained more than 5% w/w of ammonia, they were poisons included in Part II of the Poisons List.

Part III.

FERTILISERS AND FEEDING STUFFS ACT.

Table 21.

Fertilisers.

No. F.&F.	Nature of sample	% Phosphoric acid (P2O5) Soluble G.	F.	Insoluble G.	F.	Total G.	F.	% (N) Nitrogen G.	F.	Potash K2O G.	F.
1	Superphosphate	17.2	21.7	—	—	—	—	—	—	—	—
2	Superphosphate	18.3	19.5	—	—	—	—	—	—	—	—
3	Bone Meal	—	—	—	—	20.6	29.1	3.75	4.10	—	—
4	Bone Meal	—	—	—	—	21.0	29.0	3.70	4.00	—	—
5	Seaweed Humus Fert.	—	—	3.46	11.0	—	—	3.67	4.15	—	—
6	Organic Potassic Fert.	—	—	—	—	1.0	1.29	2.00	2.29	—	—
7	Sulphate of Ammonia	—	—	—	—	—	—	20.6	21.4	—	—
8	Sulphate of Ammonia	—	—	—	—	—	—	20.0	21.1	—	—
11	Liquid Manure	—	—	—	—	9.0	6.2	15.0	12.6	5.0	7.5

Table 22.

Feeding Stuffs.

No. F.&F.	Nature of sample	Oil % G.	F.	Albuminoids % G.	F.	Fibre % G.	F.
9	National Poultry Food No. 1.	3.0	3.1	16.0	17.0	7.5	5.8
10	National Cattle Food No. 1.	3.5	3.6	19.5	19.1	9.0	10.1

G.—Guaranteed. F.—Found.

Of the eleven samples of fertilisers and feeding stuffs examined only two fell within the limits of variation allowed by the act. Seven samples contained slight excesses of nitrogen or phosphoric acid or both, which is a feature not to the prejudice of the purchaser. One sample of National Poultry Food No. 1. was deficient in fibre to the extent of 1.7% and one sample of Liquid Manure (F. and F.11) was deficient in both nitrogen and phosphoric acid (P2O5) to the extent of 16 and 31 per cent. respectively. Sample No. F and F.11 requires some comment. The composition of this sample was declared on the basis of weight in volume. The Fertilisers and Feeding Stuffs Act make no provision for liquid manures but communication with the Ministry of Agriculture and Fisheries gave an opinion that the composition should be expressed on a weight on weight basis. The specific gravity of the sample was found to be 1.2. The nitrogen content was declared at 15% weight in volume. Expressed on the weight/weight basis the nitrogen figure would be 12.5%. The advantage of the weight/volume declaration to the vendor thus becomes obvious.

Part IV.

WATERS AND SEWAGE CHLORINATION.

Two hundred and seventeen waters were examined, the various sources of which are tabulated below.

Table 23.

Source	Total
City Water supplied from tap at Canynge Hall	34
City Water supplied from tap at Beckington Rd., Knowle ...	46
Knowle Reservoir	4
Corporation Institutions and Clinics	5
Private Houses	9
West Gloucester supply at Downend and Frenchay	34
Portishead supply at Ham Green Hospital	25
Wells and Pumps	8
Portishead Private Houses	1
Springs and Lakes	29
Rain water	1
Corporation Drainage Department	2
Swimming Bath Water	1
Subsoil percolation water	7
Sewage	5
Trade effluent	5
Miscellaneous	1
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The city water, as supplied from the Barrow Reservoirs to the laboratory, was examined at least once a fortnight throughout the year, and the Sherbourne spring water, which supplies a portion of the southern part of the city, was examined weekly.

The mean figures of analysis are appended, together with those of the West Gloucester and Portishead public supplies, which serve Corporation institutions at Downend, Frenchay and Ham Green.

Table 24.

Source	Bristol Supply		West Gloucester	Portis-head
	Tap at Caynge Hall	Tap at Beckington Rd., Knowle	Taps at Downend & Frenchay	Tap at Ham Green
	Parts per 100,000		Parts per 100,000	
No. of analyses	34	46	34	25
Total Solids	29.7	36.3	39.8	52.3
Mineral matter	27.3	33.5	37.2	48.3
Loss on ignition	2.4	2.8	2.6	4.0
Chlorine as Chlorides ...	1.2	1.1	4.1	2.2
Total Oxidised Nitrogen ...	0.14	1.3	0.05	0.18
Free Ammonia	0.0025	0.0035	trace	0.0064
Albuminoid Ammonia ...	0.0017	0.0025	trace	0.0031
Total Hardness (Clark's Scale)	18.5	24.2	18.3	26.5
Permanent Hardness (Clark's ,,)	4.6	6.5	5.4	10.1
pH	7.6	7.4	7.5	7.4

The above figures show that these public supplies possess great organic purity, and only on a few occasions were the bacteriological counts rather higher than desirable.

Very frequently, samples collected at Canynge Hall give very faint reaction for nitrate and only on a few occasions was any free residual chlorine detected. This is probably due to the distance from the source, also the age of mains, and " dead ends " may be factors in the case.

The samples of water from the Sherbourne spring source collected at Knowle, consistently gave well marked evidence of ammonia-chlorine treatment, showing only slight traces of nitrites. Free residual chlorine was not detected in the West Gloucester and Portishead Supply.

Three samples of water from a hot water supply were examined for lead. In one sample the amount was slightly in excess of the accepted limit of 0.1 part per million.

Sewage Chlorination.

In February 1945 the new Chlorination Officer (who works under the supervision of the City Analyst) was appointed, and treatment of the sewage was restarted that year.

During the year 1945-46, river samples have been taken at many points, between Hanham Lock and the open channel. In general, results have been expected—the steep decline in the oxygen content of the water as it passes through the city is most marked.

Samples from the lower tidal reaches of the river were taken on board the Mud Hopper Ship, S.S. Frome, by arrangements with the Port Authority Dredging Superintendent and the Captain of the ship.

Owing to the abnormal flow of fresh water, the river conditions from a septicity point of view was satisfactory throughout the season, and more detailed attention was given to the sewers.

About a hundred samples were taken in connection with the experimental use of bleach liquor for flushing the sewers and prevention of "seeding" fresh or treated sewage by old and septic deposits.

Several hundred samples have been taken and tested on site in order to control the operation of the chlorinator when finding the actual demand of a sewer under operating conditions. A very satisfactory set of information has been obtained regarding five trunk sewers, which should enable more effective results to be obtained and reduce wastage of chlorine.

A new station has been established treating the Clifton low level sewer before it receives the Gas Works effluent.

Investigation has been started regarding the effect of possible interaction between the chlorine solution and phenolic or other compounds present in the sewage. It seems possible that some chloro-phenolic bodies may be produced and have an even greater sterilising effect than chlorine alone.

Part V.

RAG FLOCK ACT.

Thirten samples were examined to see whether they conformed to the standard of cleanliness laid down in the Rag Flock Act.

All except one sample were within the limits permitted under the act, this sample contained an excess of thirty parts per million of chlorine.

A Report of the Inter Departmental Committee on the Rag Flock Acts was issued in April 1946 and a few of its conclusions and recommendations are appended.

a. Rag Flock.

I. It is reasonable to infer that there is a definite potential danger to public health arising from the use of dirty filling materials.
II. The test prescribed by the Rag Flock Regulations 1912 ("the chlorine test") is in some respects not a satisfactory test of cleanliness for rag flock.
III. The Rag Flock Acts, 1911 to 1928 and the regulations made thereunder are inadequate to secure proper cleanliness of rag flock used for the manufacture of upholstery, bedding and other household furniture.
IV. There should be a statutory prohibition against the sale of unclean rag flock intended for use as filling material.
V. The present statutory definition of "flock manufactured from rags" is not sufficiently wide and should be extended.
VI. All premises upon which rag flock is manufactured or stored for sale, or is used for the purpose of making bedding, upholstery or other household furniture should be registered and the use for those purposes of unregistered premises should be prohibited.
VII. Local Authorities should be the Registration Authorities.

b. Filling Materials other than Rag Flock.

XXIV. It should be made an offence for any person to sell, offer for sale or have in his possession for sale any unclean filling material, or any finished article containing such material, the Courts should be empowered to order the seizure and destruction of unclean filling materials.

c. All Filling Materials.

XXVIII. The Fenton test at present under investigation by the British Standards Institution, in conjunction with the trade, is the best available test for rag flock and animal fibres generally and should be considered for incorporation in regulations, together with suitable standards. It is, however, necessary to devise other tests for cotton flocks and certain other vegetable fibres.

XXXII. There should not be any general legislative restriction on the use of reconditioned filling materials as such but the re-use of certain fillings for which a satisfactory test of cleanliness has not so far been devised should be prohibited pending the discovery of a suitable test.

XXXIV. It is desirable that filling materials in stuffed toys should be required to comply with any standards of cleanliness laid down for bedding and upholstery.

The Committee finally state that they feel that restrictive legislation dealing with a subject which touches so closely upon the daily lives of the whole population should not be too long postponed.

Part VI.

MISCELLANEOUS ANALYSES.

a. Infestation.

Of 78 samples submitted for examination on account of infestation or general condition, 30 were condemned as being infested, while 13 others showed evidence of moulds or were otherwise adjudged unfit for consumption.

Tyroglyphid organisms were in a majority, while Ephestia infestation was also much in evidence.

In a few cases, Cheyletus eruditus was demonstrated, and as this species is predaceous on Tyroglyphidae, it is possible that the material was originally infested by Tyroglyphidae which were subsequently exterminated.

b. General.

The samples examined under this heading numbered 96 and were of so diverse a character as to render a concise summary impossible.

They included many specimens submitted by members of the public in the belief that their rations of tea, sugar or fats were not all that they purported to be. With one or two minor exceptions—where fats were shown to have incipient rancidity—the complaints were unjustified.

The Contracts Department was responsible for submitting samples of soap substitute, paint, etc., and a small number of investigations were carried out at the request of the Ministry of Food.

Owing to the release of quantities of war-time emergency stores, it was necessary to make many examinations of foodstuffs before they could be sent for use in the hospitals and institutions of the City.

Among the items of interest were doughnuts submited on account of alleged fragments of glass in them, a loaf of bread containing a cigarette end, and a crustacean from a water-pipe—identified as asellus aquaticus or water-louse.

Examinations of many samples of canned foods were also made, and investigation of the oil from a fish-frying establishment was carried out in order to ascertain the degree of metallic contamination resulting from the use of a galvanised pan.

Twenty-six samples of Dried Milk were examined for solubility. The highest amount of insoluble material found was 38.8 per cent., the lowest being 0.4 per cent.

c. Biochemical.

Ninety-one determinations of iron in urine from patients suffering from blood abnormalities were carried out as a check on the rate of excretion of blood iron, and to ascertain the times of maximum excretion. Eight specimens of blood from the same patients were also examined.

Ten samples of blood from patients suffering from carcinoma and three specimens of urine were examined for lead.

d. Toxicological.

A total of 19 specimens were examined under this heading, and included in these were, meat, chocolates, tea infusion, pills and medicine all suspected of containing noxious substances, but showing no abnormality on examination.

Sulphanilamide was demonstrated in the urine of a child which had died in a coma, and the amount determined—4.5 grains was the result of the administration of one tablet of 7.5 grains.

An examination of potatoes alleged to have caused sickness was made for the Ministry of Food, and the solanine content was determined and found to be 5 mg. per 100 grams of the peeled sample. Arsenic was demonstrated to be absent, and the potatoes were without harmful effect on a guinea-pig and a rabbit which were fed with them over a period of 48 hours.

The contents of a bottle of fluid swallowed in mistake for an 'anti-wind' medicine by a child proved to be zinc chloride soldering flux, while some pills alleged to have caused severe jaundice were found to contain aloes and colchicine.

An investigation—carried out for the Veterinary officer of the Ministry of Food—was made of some specimens from an animal which had died following a wash in arsenical sheep dip and a road journey.

The amounts of arsenic (as As_2O_3) found were:—

Wool	1000	parts per million
Skin	200	,, ,, ,,
Fat covering carcass ...	0.6	,, ,, ,,
Liver	20	,, ,, ,,
Heart	23.	,, ,, ,,
Kidneys	100	,, ,, ,,
Stomach contents ...	5.7	,, ,, ,,

The practice of submitting sheep to physical disturbance immediately after a wash is liable to cause the animal to perspire with absorption of Arsenic through the wool, skin, etc.

The results certainly suggest absorption through the skin rather than ingestion by mouth. It is apparent that the animals should be permitted a maximum period of quiet rest after being submitted to an arsenical wash.

Two cylinders of Nitrous oxide were submitted by a hospital, as patients anaesthetised with this gas for dental treatment became very cyanosed, obstreperous and somewhat violent. The gas in the cylinders was examined in accordance with the monograph in the British Pharmacopoeia for carbon monoxide, arsine, phosphine, halides and sulphuretted hydrogen, acidity and alkalinity, reducing and oxidising substances and in addition for carbon dioxide and nitric oxide. No injurious impurities were found to account for the untoward effects resulting from the use of the gas.

e. Health Department Samples (C.S.I.).

Twelve samples were examined and comprised the following:—

Nature of sample.	Result.
2 Canned Crawfish ...	Fit for human consumption.
5 Sugar	Three contaminated with feline urine, and two uncontaminated.
1 Brandy	Undiluted.
1 Insecticide	Probably an effective insecticide.
1 Canned Pork Luncheon Meat	Unfit for human consumption.
2 Choc-Malt Spread ...	Unfit for human consumption.

Part VII.

GAS REGULATIONS ACTS, 1929-1934.

Examination of the gas supplied by the Bristol Gas Company for calorific value, pressure and purity has been carried out continuously under the Special Prescriptions issued by the Ministry of Fuel and Power and since the gas is not ordinarily saturated with water vapour, hygrometric observations for the purpose of determining the proportion of water vapour in the gas as supplied to the consumer, were also made.

The three testing places at Avon Street, Canons Marsh and Stapleton Road are each equipped with a Fairweather continuously recording calorimeter and each of these calorimeters must be inspected, adjusted and its record verified at least twice a week, two verifying tests being made at each visit.

The chart record is removed each week, and the average calorific value computed for each six-hourly period, whence the day's average, and finally the average for the week are obtained. At each visit, the recording chart of the pressure gauge is examined and a three minute test for the purity of the gas (i.e. the absence of sulphuretted hydrogen) is made.

A detailed report containing the results of all these tests is sent each week to the Company and to the Ministry of Fuel and Power.

On any occasion on which any of the Recording calorimeters are out of action, tests are made with the Non-recording calorimeter in accordance with the number of tests specified in the schedule to the Special Prescriptions.

The prescribed number of tests per quarter is now:

65 at Avon Street
52 at Stapleton Road
39 at Canons Marsh

making 624 testings for the year, including 80 allocated to Sundays.

The Urban District Councils of Kingswood, Keynsham, Long Ashton and Mangotsfield are entitled to carry out a small specified number of tests, but, as continuously recording instruments are used, they have elected to accept the reports of the Gas Examiner appointed by the Bristol City Council as being a satisfactory determination of the calorific power for their purpose.

A special prescription, superseding all other prescriptions came into force on 1st January 1941 requiring all service pipes for calorific value and purity determinations to be connected to the mains at the common inlet to the station governors.

This was necessary since owing to bomb damage, some mains might be inoperative and the calorific value determined would not be truly representative.

On July 1st 1941 the calorific value, formerly declared at 480 B.Th.U. (gross) per cubic foot, was lowered to 470 B.Th.U. per cubic foot, and a year later it was found necessary to declare a value of 460 B.Th.U. at which figure it now stands.

At Avon Street testing station the record was available for 319 days, and it was only necessary to make one non-recorder test. The average calorific value for the year was 461 B.Th.U., the maximum pressure was 13.0 inches (of water) and the minimum 3.6 inches.

At the Stapleton Road station, no non-recorder tests were carried out, and the record was available for 310 days, giving an average of 461 B.Th.U. The maximum pressure measured at this station was 7.6 inches, with a minimum of 3.3 inches.

At the Canons Marsh works the number of prescribed tests is 156, but the record was available for 302 days and in addition it was necessary to carry out three non-recorder tests. The average calorific value was 460 B.Th.U. with a maximum pressure of 9.4 inches and a minimum of 3.4 inches.

The satisfactory continuity of the record was not achieved without considerable attention to the mechanical components of the instruments, which are now quite old, and cannot therefore be expected to function for long periods without faults developing.

Further the question of the supply of spare parts is an acute one, and in particular, when the chart driving mechanism on two of the instruments failed, much attention was necessary in order to preserve the record for official purposes.

Owing to the death of Mr. F. E. Needs and the absence of any other duly appointed Gas Examiner, official testings for the fourth quarter of the year were begun on November 8th, and the average calorific value for the quarter was computed from testings made from that date, all previous testings being discarded.

The following table gives the figures for the four quarters of the year.

Table 25.

Quarter ended.		Calorific value B.Th.U. (Gross) per cubic foot.	Pressure	H2S
31st March	...	461	above 2 inches	nil
30th June	...	460	" " "	"
30th September	...	461	" " "	"
31st December	...	461	" " "	"

Part VIII.

ATMOSPHERIC POLLUTION.

Four stations are now established in the City for the measurement of the degree of pollution of the atmosphere. The investigations commenced in January 1935 as far as Bristol is concerned, although several other cities had been making observations for many years.

The pollution is measured by the collection and analysis of the soluble and insoluble matter which is deposited from the air in a deposit gauge and which consists of a large glass bowl of known area, connected to a glass reservoir. Each reservoir is replaced by a clean one on the last day of each month. As a safeguard each station is inspected about the 20th of each month, particularly after heavy rainfall. The stations now established give a reasonable survey for the City. The Waterworks and Shaftesbury Crusade stations, representing industrial areas, the Zoological Gardens a residential area, and the Blaise Castle site a country area.

The monthly results with totals for the year are shown in the tables in tons per square mile and are also shown graphically. The graph indicates clearly the degree of pollution and shows the seasonal peaks in the winter months. The Shaftesbury Crusade figures may be considered as those of a typical industrial area, and in consequence show the heaviest deposition. The Waterworks station would perhaps be better described as representative of a business or office site since many industries are moving from the city centre. The Blaise Castle curve shows the least deposition being just slightly better than conditions prevailing at the Zoological gardens.

Besides the deposit gauges, measurement is made at each station of the sulphur in the atmosphere by means of the now well established lead peroxide method. The Table No. 30 indicates the average daily weight of sulphur trioxide in milligrams per 100 sq. cm.—calculated for each month.

Again the order of pollution follows approximately the same trend as given by the deposit gauges.

Rapidly growing attention is being focussed upon the problem of atmospheric pollution particularly with respect to Town Planning schemes and the use of smokeless fuels. A regional smoke abatement council has been set up in the Bristol area and it is hoped that discussion of matters relating to smoke abatement, the giving of advice in difficult cases, the maintenance of close liaison with other such councils, propaganda, education, research and co-operation with industry, may lead to a cleaner and purer air supply.

YEAR 1946.

Composition of solids collected in deposit gauge at Zoological Gardens, Clifton, in tons per square mile.

Table 26.

Month	Rainfall in inches	Total Solid matter (suspended and dissolved)	Insoluble solid matter			Total dissolved matter	Sulphate (as SO3)	Chlorine (Cl.)	Lime (CaO)
			Tar	Carbonaceous matter other than tar	Mineral matter (ash)				
January ...	3.68	11.29	0.10	2.54	2.29	6.36	2.54	1.02	0.19
February ..	2.93	7.15	0.07	1.05	1.15	4.88	1.78	1.63	0.48
March ...	1.20	9.63	0.14	1.91	2.09	5.49	3.35	0.43	1.94
April ...	2.25	13.32	0.07	2.59	3.75	6.91	2.01	0.36	0.78
May ...	4.44	8.62	0.09	2.07	2.12	4.34	1.78	0.27	0.68
June ...	3.45	9.31	0.06	1.42	1.32	6.51	1.45	0.70	0.39
July ...	1.67	5.87	0.08	1.18	1.77	2.84	1.45	0.37	0.48
August ...	5.54	9.70	0.08	1.30	1.55	6.77	0.98	1.15	0.48
September ...	4.40	9.61	0.08	1.74	1.63	6.16	1.42	0.60	0.63
October ...	1.04	6.78	0.12	1.41	1.59	3.66	1.56	0.49	0.70
November ...	4.44	15.03	0.04	1.45	1.35	12.19	2.81	0.77	1.31
December ...	3.81	8.86	0.15	1.62	1.67	5.42	1.48	1.90	1.94
Totals for the year 1946 ...	38.85	115.17	1.08	20.28	22.28	71.53	22.61	9.69	10.00
Mean monthly deposit ...	3.24	9.60	0.09	1.69	1.86	5.96	1.88	0.81	0.83

YEAR 1946.

Composition of solids collected in deposit gauge at Blaise Castle, Henbury, in tons per square mile.

Table 27.

Month	Rainfall in inches	Total Solid matter (suspended and dissolved)	Insoluble solid matter			Total dissolved matter	Sulphate (as SO3)	Chlorine (Cl.)	Lime (CaO)
			Tar	Carbonaceous matter other than tar	Mineral matter (ash)				
January ...	2.97	10.64	0.06	1.45	1.95	7.38	3.01	0.45	0.38
February ...	1.80	8.55	0.10	1.69	1.84	4.92	2.42	0.81	0.37
March ...	0.93	6.24	0.17	1.80	1.83	2.44	1.34	0.30	0.26
April ...	2.10	10.28	0.10	2.15	3.49	4.54	2.97	0.32	0.06
May ...	4.15	7.27	0.10	2.19	1.49	3.49	1.99		
June ...	2.70	7.06	0.13	2.27	2.23	2.43	0.67	9.75	4.45
July ...	1.55	7.24	0.06	1.63	2.61	2.94	1.01	1.71	0.74
August ...	5.20	6.36	0.10	1.85	1.92	2.49	1.30	0.65	0.09
September ...	3.60	6.50	0.19	1.39	1.33	3.62	2.72	0.82	0.05
October ...	0.97	4.96	0.06	0.95	1.59	2.36	0.67	0.56	0.46
November ...	3.47	5.25	0.08	1.24	1.34	2.59	1.87	1.64	0.58
December ...	3.00	9.33	0.04	1.44	1.38	6.47	2.61	0.44	0.47
Totals for the year 1946 ...	32.44	89.68	1.19	20.02	23.00	45.67	22.58	0.58 1.85	0.35 0.65
Mean monthly deposit ...	2.70	7.47	0.10	1.67	1.92	3.80	1.88	0.43	0.36

YEAR 1946.

Composition of solids collected in deposit gauge at Shaftesbury Crusade, St. Philips, in tons per square mile.

Table 28.

Month	Rainfall in inches	Total Solid matter (suspended and dissolved)	Insoluble solid matter			Total dissolved matter	Sulphate (as SO3)	Chlorine (Cl.)	Lime (CaO)
			Tar	Carbonaceous matter other than tar	Mineral matter (ash)				
January ...	3.05	36.39	0.31	9.89	9.47	16.72	6.18	2.92	1.35
February ..	1.74	12.10	0.17	2.98	2.84	6.11	2.79	1.66	0.85
March ...	0.57	7.65	0.08	2.32	1.80	3.45	2.52	0.28	0.52
April ...	1.85	25.11	0.17	6.92	8.99	9.03	3.77	0.83	1.33
May ..	2.95	19.79	0.32	6.73	7.03	5.71	2.96	1.00	0.95
June ...	2.36	21.26	0.17	5.18	6.48	9.43	1.04	1.97	1.14
July ...	1.02	16.27	0.17	5.00	4.79	6.31	1.65	0.65	0.76
August ...	5.28	26.76	0.14	6.30	7.05	13.27	4.65	1.59	1.14
September ...	4.10	25.29	0.26	8.31	7.43	9.29	2.98	1.31	2.80
October ...	1.02	20.68	0.17	4.58	6.37	9.56	2.05	1.02	1.42
November ...	3.95	37.97	0.20	11.51	10.73	15.53	3.37	1.25	1.80
December ...	3.28	36.21	0.37	9.76	11.15	14.93	4.09	2.65	1.61
Totals for the year 1946 ...	31.17	285.48	2.53	79.48	84.13	119.34	38.05	17.13	15.67
Mean monthly deposit ...	2.60	23.79	0.21	6.62	7.01	9.95	3.17	1.43	1.31

YEAR 1946.

Compositon of solids collected in deposit gauge at Bristol Water Works building, Marsh Street, in tons per square mile.

Table 29.

Month	Rainfall in inches	Total Solid matter (suspended and dissolved)	Insoluble solid matter			Total dissolved matter	Sulphate (as SO3)	Chlorine (Cl.)	Lime (CaO)
			Tar	Carbonaceous matter other than tar	Mineral matter (ash)				
January ...	3.54	25.75	0.34	8.06	9.02	8.33	3.07	2.25	0.73
February ...	2.76	20.62	0.48	5.76	4.95	9.43	3.51	2.33	1.03
March ...	1.04	15.25	0.38	4.73	5.54	4.60	2.07	0.65	0.82
April ...	2.18	23.62	0.42	7.66	9.34	6.20	3.60	0.56	0.96
May ...	4.16	18.64	0.30	4.53	6.05	7.76	3.41	0.45	1.08
June ...	2.84	15.57	0.19	3.42	5.39	6.57	1.39	0.81	0.72
July ...	1.30	13.83	0.20	5.41	4.28	3.94	1.80	0.57	0.56
August ...	5.60	19.11	0.25	5.66	4.56	8.64	4.38	1.82	1.34
September ..	4.40	14.45	0.15	4.49	4.15	5.66	4.51	0.98	0.13
October ...	1.04	12.30	0.24	3.35	4.60	4.11	1.69	0.57	0.54
November ...	4.31	15.66	0.26	5.10	4.91	5.39	3.33	0.91	0.96
December ...	3.59	25.00	0.34	7.01	7.32	10.44	3.47	2.43	1.45
Totals for the year 1946 ...	36.76	219.80	3.55	65.18	70.11	81.07	36.23	14.33	10.32
Mean monthly deposit ..	3.06	18.32	0.30	5.43	5.84	6.75	3.02	1.19	0.86

Atmospheric Pollution, 1946.
Estimation of Sulphur by Lead Peroxide Method.

Table 30.

Wt. of SO3 collected MG./100 square cm. per day.

Month.		Zoological Gardens.	Water Works, Marsh Street.	Shaftesbury Crusade, St. Philips.	Blaise Castle, Henbury.
January	...	2.19	3.19	2.81	1.22
February	...	0.75	—	2.67	0.80
March	...	1.74	3.11	3.25	1.10
April	...	0.75	2.22	2.09	0.74
May	...	0.71	1.78	2.02	0.37
June	...	0.26	1.30	2.33	0.37
July	...	0.29	1.26	1.98	0.44
August	...	0.22	1.05	1.67	0.32
September	...	0.30	1.37	1.81	0.45
October	...	1.50	2.69	2.63	0.62
November	...	1.09	2.78	2.92	0.81
December	...	1.51	3.95	3.62	1.49

Research Problems.

Finally a few words might be added concerning a phase of the Laboratory work which is at present somewhat undeveloped. Problems arise from time to time resulting from new Food Orders and the like and frequently a considerable amount of experimental work is necessary in order to evolve suitable methods of analysis of the article concerned. Three such problems have been considered during the year and must be looked upon in the light of long term research problems in Food and Water analysis.

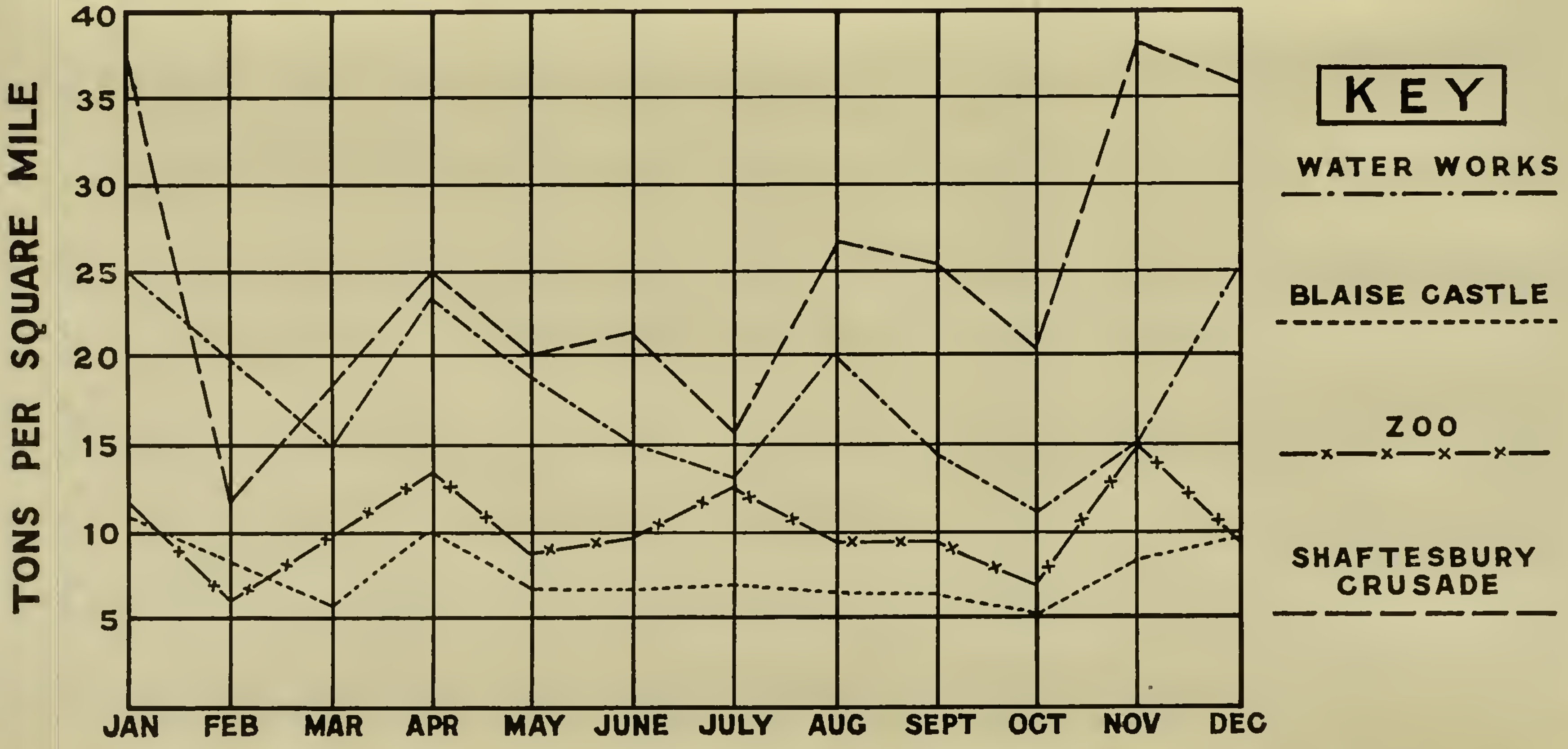
The first problem dealt with the examination of lard and cooking fat. Under the prevailing difficulties of food rationing and the serious lack of fats, the housewife is, of course, only too pleased to receive almost any type of cooking fat. It is to be hoped that in the not too distant future, if lard is demanded, then that fat shall be supplied. The problem then arising will involve the differentiation of genuine lard and the hydrogenated cooking fats. Tentative work indicates that the presence of iso-oleic acid in hydrogenated fats coupled with other data is the best approach to the problem and a number of fats have been examined along these lines in order to establish a sound basis for future work.

The second investigation was made in the field of vitamin assay. Statutory Rules and Orders 1946 No. 2169 Emergency Laws (Transitional Provisions) Food (Labelling) will necessitate assays of vitamins A, B1, C and D. The Laboratory is not equipped to carry out biological assays so every effort will be made to seek methods of chemical assay. The determination of vitamin C, ascorbic acid, is well established. Vitamins A and D are under consideration and will present some difficulty. During the year the estimation of vitamin B1, aneurine hydrochloride, was studied in some detail and a useful colorimetric method examined which with some modifications should be applicable to most food products containing this anti neuritic factor.

The third problem concerned the estimation of fluorine. An excellent method has been studied by the Society of Public Analysts Sub-Committee for Analytical methods and was evolved primarily to estimate the fluorine content of acid calcium phosphate, baking powder and self-raising flour. The problem of fluorides in water has caused some concern in recent years and it is established that mottled enamel, a defect of the teeth, is caused by the intake of excess of fluoride from food or water. The disease occurs primarily in children during tooth formation and has been observed in many parts of the world. Dental fluorisis was first noted in this country in 1931 at Maldon, Essex. A large number of children were affected and the water supply found to contain some 5 parts per million of fluoride. Despite this finding it has also been shown that too little fluoride causes dental troubles, since fluoride is present in dental enamel and decay of the teeth will result if the enamel is defective. It has been shown that to produce a hard enamel the optimum amount of fluoride is 1.0 to 1.5 parts per million and that amounts below 0.25 are insufficient. These findings are confirmed in the United States and it is interesting to note that the New York State Department of Health has decided to add sodium fluoride to the New York water supply to give a water containing 1 part per million of fluoride.

ATMOSPHERIC POLLUTION. 1946.

TOTAL SOLID MATTER (SUSPENDED AND DISSOLVED.)



F.G.E47

Examination of the four main supplies of the City Water gave the following figures for fluorine.

The City Supply	...	0.052 parts per million
Portishead ...	...	0.066 ,, ,, ,,
West Gloucester	...	0.142 ,, ,, ,,
Sherbourne Spring	...	0.181 ,, ,, ,,

It would appear since no serious tooth troubles are reported that the water supply is not the whole story and that fluorides from other food sources serve to maintain an appropriate balance.

As a matter of interest the four principal sources of the city's supply of beer were examined with the following results.

W.1.	...	...	0.29 parts per million
W.2.	...	...	0.72 ,, ,, ,,
W.3.	...	...	0.26 ,, ,, ,,
W.4.	...	...	0.57 ,, ,, ,,

It was considered probable that appreciable amounts of fluoride result from the processing of the beer. It is hoped that opportunity will arise to study the fluoride content of other commodities since the precise role of fluoride in adult life is not fully established.

Appendix IV.

TREATMENT OF VENEREAL DISEASES

By Dr. A. E. W. McLACHLAN, Director of the Bristol Services.

The noteworthy features of the year 1946 have been the very marked increase in new male registrations, the upward trend in early syphilitic infections, and the further progress made in assessing the value, and limitations, of penicillin therapy.

The demobilisation, and return to civilian life, of many members of H.M. Forces has greatly increased the clinic clientele: of the new patients from this source, only a relatively small number, however, are continuing treatment or observation for infections previously dealt with in the Services, or have contracted their infections elsewhere in this area.

There has been a marked increase (pages 120-121) in early syphilitic infections in males and females, and in gonorrhoea in the male, while a paradoxical decrease is seen in gonococcal infections in the female. The increase in male infection is explicable by demobilisation. The teaching of sex hygiene in the Services has led to many of these patients coming for examination in an early stage of the disease. In only a few instances had infection been contracted abroad, and the patient demobilised during the incubation period. There is little doubt that the number of female gonorrhoea patients is much below the real figure, and is most probably due to a number of factors, inability to obtain adequate identifying particulars because of misplaced chivalry on the part of the infected male patient, casual promiscuity, antiseptic douching for contraceptive purposes, or in a few cases, self medication with sulphonamides.

The group of conditions, classified as non-venereal, shows a marked increase in the incidence of non-gonococcal urethritis in the male, in the occurrence of genital warts in both sexes, and the more frequent recognition of trichomonatous infestation in women. Many of the cases of non-specific urethritis have proved refractory to penicillin and the sulphonamides: on the other hand the introduction of the podophyllin treatment of warts, while not as efficacious as originally claimed, has proved a very real therapeutic advance.

During the year, there has been great extension of the use of penicillin in all stages of syphilis, and in gonorrhoea. Much progress has been made in its evaluation: further evidence of clinical or serological relapses has proved conclusively that penicillin alone, in the dosage generally advocated, is inadequate to cure all cases of early syphilis. Inference from experimental observations has shown that the curative dose of penicillin lies possibly in the region of 10 million units: on the other hand it is now recognised that penicillin has not a fixed chemical formula, but is composed of a number of factors—varying in proportion according to the method of preparation—some of which are inert against syphilis. Until the anti-syphilitic penicillin factor is isolated in a pure state, it is considered advisable to reinforce above dosage of the non-toxic penicillin with arseno-bismuth administration. Various schemes of combined treatment are in use to suit the individual needs of the patient: there is a marked tendency to opt for the shortest, and most intensive treatment, with a consequent increase of in-patients. While this is of value from the public health viewpoint, the difficulty of ensuring adequate surveillance is often markedly increased, because of the sense of security this form of treatment gives the patient.

In the late stages of syphilis, penicillin has proved a rapidly-acting drug in healing skin and other lesions: in cardio-vascular syphilis, the response has shown wide variations: in neuro-syphilis marked symptomatic improvement has followed high dosages from 10 to 20 million units. The intrathecal route, employing a dosage of 20,000 to 50,000 units, once or twice weekly, which has been advocated in the literature, has not, in our experience, proved of great adjuvant value; controlled artificial fever, by means of a cabinet, still remains the method of choice for these cases.

In the early stages of congenital syphilis, penicillin has given uniformly favourable results. It has been found that infants, shortly after birth, tolerate very large doses (half of that now used for adults) of penicillin without ill-effect: this, of course, represents a very much higher weight-dosage.

In gonorrhoea, out-patient treatment with oil-wax-penicillin emulsion has continued to be successful, although the initial dosage of this drug has been doubled, and some twenty-five per cent. of cases required repeated treatments after 24 or 48 hours. With modern treatment, the complications of gonorrhoea are now rare. The ease and certainty of cure, without fear of untoward complications, has undoubtedly led to many patients regarding gonococcal infection as a trivial interruption to their promiscuous habits.

The wide use of penicillin therapy has been productive of remarkably few side-effects: the most constant is temporary disturbances of the menstrual rhythm. It is hoped in due course to publish our observations on this.

In the diagnosis, control of treatment, and tests of cure of syphilis and gonorrhoea, the clinician is largely dependent upon pathological investigations: the importance of adequate laboratory facilities cannot be too highly stressed. It is a pleasure to acknowledge the assistance and close co-operation received from Dr. Cooper and the Preventive Medicine Laboratory staff, who have not only dealt with an increasing number of specimens, but have also been active in collating the laboratory findings with the clinical pictures to secure the maximum progress in clinic-laboratory technique.

Special Diagnostic Clinic.

The Special Diagnostic Clinic, run in conjunction with the Maternity and Child Welfare Department, has continued to serve a very real need in the detection, or exclusion of maternal infection, and in the diagnosis of the less serious genito-urinary conditions, *e.g.,* trichomonatous vaginitis, non-specific vaginitis, vaginal thrush, etc., occurring during pregnancy. Many of these cases have shown marked improvement or complete relief by the treatment advised during their time of observation (approximately three weeks). On the other hand, facilities are required for the continuance of treatment of those whose symptoms have not completely cleared up: in the majority of cases this can be carried out more efficiently by a skilled attendant than by the patient herself.

During 1946, 426 patients were referred to the clinic, the details being:—

		1946.
No. of medical officers' sessions		51
No. of new registrations		426
Total attendances		1,524
Total discharged (no evidence of venereal infection)		412
Remaining under observation—31st December ...		32
Total transferred to treatment centre suffering from:—		
Syphilis: New infections—		
Early	7	
Late and latent	4	
Congenital	2	
Previously treated infections ...	6	19
Gonorrhoea		8

Social Welfare Work in the Clinic. (statistics page 122).

During the year the social workers have continued their endeavours to control infection by the expeditious follow-up of suspected sources of infection and by the prevention of default before completion of treatment and tests of cure. The success of their work is reflected in the low default rate. The difficulties of obtaining sufficient particulars to identify contacts to infection have been even more marked than in previous years, while, despite the recent intensive and widespread propaganda, there is still insufficient knowledge among many members of the general public as to th potential seriousness of the venereal diseases and the necessity for prompt diagnosis and adequate treatment of infections. The "health-educative" approach adopted by the social workers has proved of the greatest value in dispelling individual ignorance and in persuading defaulting patients to re-attend. Adequate surveillance of treated patients is the more necessary because of the still incomplete evaluation of the end results of penicillin treatment of syphilis.

In one field—that of demobilised personnel, requiring further treatment or observation, and in respect of whom release forms have been received from the Services—confidential follow-up by the male welfare officer has been of the greatest value, as is shown by the following figures:—

	Army	*R.A.F.*	*R.N. and other Service*	*Total*
Number of forms received from period commencing 23/6/45 and ending 30/12/46 ...	125	25	—	150
Number who reported on own initiative ...	3	—	—	3
Number of follow-ups by Welfare Officer ...	122	25	—	147
From result of follow-up, the number forwarded to appropriate M.O.H. as now living outside the City and County of Bristol	6	—	—	6
No trace at address given	1	1	—	2
Had rejoined H.M. Forces	4	2	—	6
Persuaded to attend	111	22	—	133

The vast majority of these patients have failed to attend within 4 to 5 weeks after the date of demobilisation: many reasons were advanced for non-attendance, but all who were contacted expressed their appreciation of the personal visit and the opportunity of discussing personal, familial, or employment problems. In many cases it was possible to give effective advice or more active help.

Appendix V.

THE WORK OF THE PREVENTIVE MEDICINE LABORATORIES

By Dr. K. E. COOPER and Dr. DOROTHY WOODMAN

The early post war years have been concerned with the laying of plans for the reorganisation of the health services of the nation. In view of the fact that the laboratory services offered by this department will have to fit in with the proposed new service, it is felt that this is an opportune moment to attempt to describe the scheme by which the department at present supplies the needs required from it by the community. We give on a separate chart a list of the authorities for whom laboratory work is done and a rough plan of the various sections within the department. It will be seen that some 14 different sections are responsible for the examination of routine material from an even larger number of outside authorities. These different sections which do the routine work are co-ordinated by central administrative offices and supplied by a number of specialist supply departments (for example, bacteriological media). They have the advantage to a large extent of interchangeable staff, and the possibility of interchange of information so that the different kinds of evidence obtained in each section may be combined and correlated. It should be obvious from this that any attempt at re-arrangement of laboratory work, for example in decentralisation to hospital laboratories, must take into account the necessity of duplicating the supply departments and administrative offices at present provided by the central department. It is therefore hoped that great emphasis will be laid by the city authorities upon the economy and efficiency which result from maintenance of a central unified department undertaking the work for a large number of authorities; such an arrangement is in the long run of much more than immediate benefit, because it enables skilled staff (medical, scientific and technical) to be trained in the numerous sections of the work which has to be undertaken by any laboratory. Such is the shortage of staff with any experience in this work that, but for the fact that the department is wide enough in its scope, and has available material to train inexperienced staff, it would have been quite impossible to carry out the large amount of routine work which increasing demands have made upon it. During 1946 the position has to some extent been alleviated by the return of a number of members from the services, but it is only fair to say that the position of acute difficulty in regard to staffing will continue for a number of years before we can hope for any permanent alleviation. Fortunately routine methods have so improved, and the prevention of infectious diseases so advanced, that no major epidemics have been encountered during the year and small outbreaks have been brought to a quick termination. Additional commitments have been undertaken by the department, such as the provision of a laboratory service for Frenchay Hospital.

Examinations made during 1946. (statistics page 109).

The number of examinations made during the year was 98,244 for the City of Bristol and 6,311 by private contract. This represents a continued increase on the figure for the last year. The incidence of diphtheria continues to decrease as a result of the immunisation programme, but the number of examinations on specimens for tuberculosis and venereal disease is still on the up grade. It is hoped that with the improved methods of diagnosis and treatment now available the peak has been reached. The increase in pathological examinations is largely due to the increased number of beds becoming available for civilian purposes as members of H.M. Forces relinquish their occupation.

The routine control of foods, milk and water has continued. More attention has had to be given to ice cream and a number of other products appearing on the market for the first time since the war. The occurrence of an extensive outbreak of typhoid in Aberystwyth, followed by outbreaks in other places, directed attention to this matter, and new regulations for the control of ice cream are being introduced on the 1st May, 1947. It will be remembered that in 1939 we directed the attention of the Health Committee to the unsatisfactory nature of this product and the need for further control. The remarks made then are being borne out by subsequent experience, and the only reason they have not been repeated is that ice cream has not been procurable in any quantity during the intervening years. The number of grades of milk which have been legalised has continued to increase and we now have tuberculin tested and accredited raw milks, pasteurised milks which include high temperature short time pasteurisation and, finally, heat treated milks. The last category, though much safer than raw milks, is not subject to the same controls as pasteurised milks, and the tests laid down as official are definitely of a lower standard. The official tests applicable to pasteurised milks have also been changed during the year, and the present position from the point of view of control is very chaotic and is regarded as very unsatisfactory. As a result of the changed tests it is no longer possible to publish tables comparable with those in previous annual reports, and as we hope that future efforts will be made to secure more adequate control by new regulations, we have omitted detailed reports from this year's annual report.

The following notes summarise the main events during the year with regard to the incidence of particular diseases, and are confined to those happenings which show anything abnormal.

Diphtheria.—Sixty cases were diagnosed in the laboratory—37 per cent. Gravis; 44 per cent. Intermediate; 16 per cent. Mitis and 3 per cent. atypical. Immunisation has thus succeeded in lowering the incidence of Intermediate and Mitis diphtheria more than it has of Gravis. With a higher percentage of Gravis infection in the community relative to the other types, it is thus even more important to persevere with the immunisation campaign as any relaxation might lead to the spread of a more virulent form than Bristol has experienced for a number of years.

Typhoid.—A small epidemic, 8 cases, occurred in a Land Army hostel outside Bristol, the source of which was in all probability polluted water used for the cattle on a farm. Steps were taken to prevent its further use and no more cases occurred. Two other cases of typhoid occurred in a boys' camp as a result of drinking polluted stream water. Further cases of infection have also been discovered in people infected abroad.

Dysentery and Food Poisoning.—The incidence of dysentery fortunately decreased during the year, though a few more cases of food poisoning occurred.

Venereal Disease—Gonorrhoea.—The cultural method for the accurate diagnosis of gonococcal infection has been more extensively used during the year, and clinicians have been impressed by the much greater superiority of this method over that of films. The fact that it is more time consuming and requires specialised media is fully compensated for by its greater reliability.

Syphilis.—Extended use has been made of the Quantitative Wassermann Reaction to control the response of the patient to the new treatment now given. This again has involved the department in more work, but is fully justified by the results.

Clinical Pathological Section.

The work of this section shows again a steady increase which is largely due to the fact that work for the thoracic unit at Frenchay Hospital has been undertaken as from April of this year.

Southmead Hospital.—Members of staff and technicians are still working in the small laboratory. So far it has not been possible to move into the larger premises which have been promised, but it is hoped that before the end of 1947 part of the buildings occupied by the Regional Blood Transfusion Centre will be allocated to the pathological laboratory and converted and made ready for use. The total number of examinations carried out for the hospital was 16,716, of which 12,824 were examined at the hospital itself. We should like to see still more investigations carried out at the hospital, especially now that there are more senior clinical staff working there every day, but until the new premises are made available this will not be possible.

Ham Green Hospital.—The technician for this hospital is now visiting the hospital one whole day each week as well as every afternoon. The work is steadily increasing, and during the year 1,829 specimens were examined at the hospital laboratory.

Clinics, Mortimer House, etc.—Requested visits to Mortimer House by the medical staff have continued. The clinics are gradually using the department more and more, not only by sending in specimens, but in certain cases by sending in the patients themselves for investigation. The work in conjunction with Dr. Bell and the sterility clinic continues and has grown during the year. The following table shows the examinations carried out:—

Number of specimens examined during the year.

Blood counts	222
Reticulocytes	16
Blood urea	20
Blood sugar	30
Urines	217
Urine for T.B.	12
Urine for bile	3
Friedman tests	115
Seminal fluids	99
Tissues	7
Faeces for fat	4
Blood sedimentation rate	11
Blood proteins	3
	759

Bristol Maternity Hospital.

Dr. Woodman still visits this hospital when necessary for blood counts on patients. The doctors there are also sending in far more work to the department itself. The number of specimens examined during the year was 144.

Frenchay Hospital.

As stated above, in April, 1946, this department was asked to undertake work for the thoracic unit which moved into Frenchay Hospital. The laboratory at the hospital was not equipped and for the first few months work was difficult. After six months, in order to assist the surgeons there, it was arranged that a technician should be sent out three days a week and that Dr. Woodman should visit two days a week for the purpose of making examinations which have to be done direct on the patients. The rest of the work comes into the central department. This is still a skeleton service, and it is hoped as more equipment and staff become available that it will be possible to increase the amount of work done on the hospital premises.

Neurosurgical Unit, Burden Institute.

Specimens have continued to come into this department for examination.

Epidemiological Section.

The appointment by the University of Dr. W. Hobson as Senior Lecturer in Preventive Medicine has formed a very welcome and long needed addition to the department. This appointment was absolutely essential as the University has undertaken the training of doctors for the Diploma in Public Health, and full courses on the lines laid down by the General Medical Council have been instituted this year. Dr. Hobson's experience in the science of nutrition and in the field side of epidemiological investigation is proving a valuable asset. The Department has long felt the need of sufficient experienced staff to enable outbreaks of infectious disease to be investigated at their sources by personnel who are fully aware of the examinations which the laboratory undertakes. The State Public Health Laboratory Service has continually emphasised this aspect, and its use to the full should enable sources of infection to be traced with much greater ease and certainty than in the past. The survey of the nutritional factors which are important in the spread of disease is also opportune, and work to this end has been commenced. The correlation of the extensive laboratory data with that of the statistics available in the department of the medical officer of health is another fruitful field for investigation, and it is envisaged that a section devoted to statistical surveys will do valuable work under Dr. Hobson's direction. His appointment by the city as assistant medical officer of health will enable him to obtain facilities for such work and should be of help also to the city departments.

Teaching and Research.

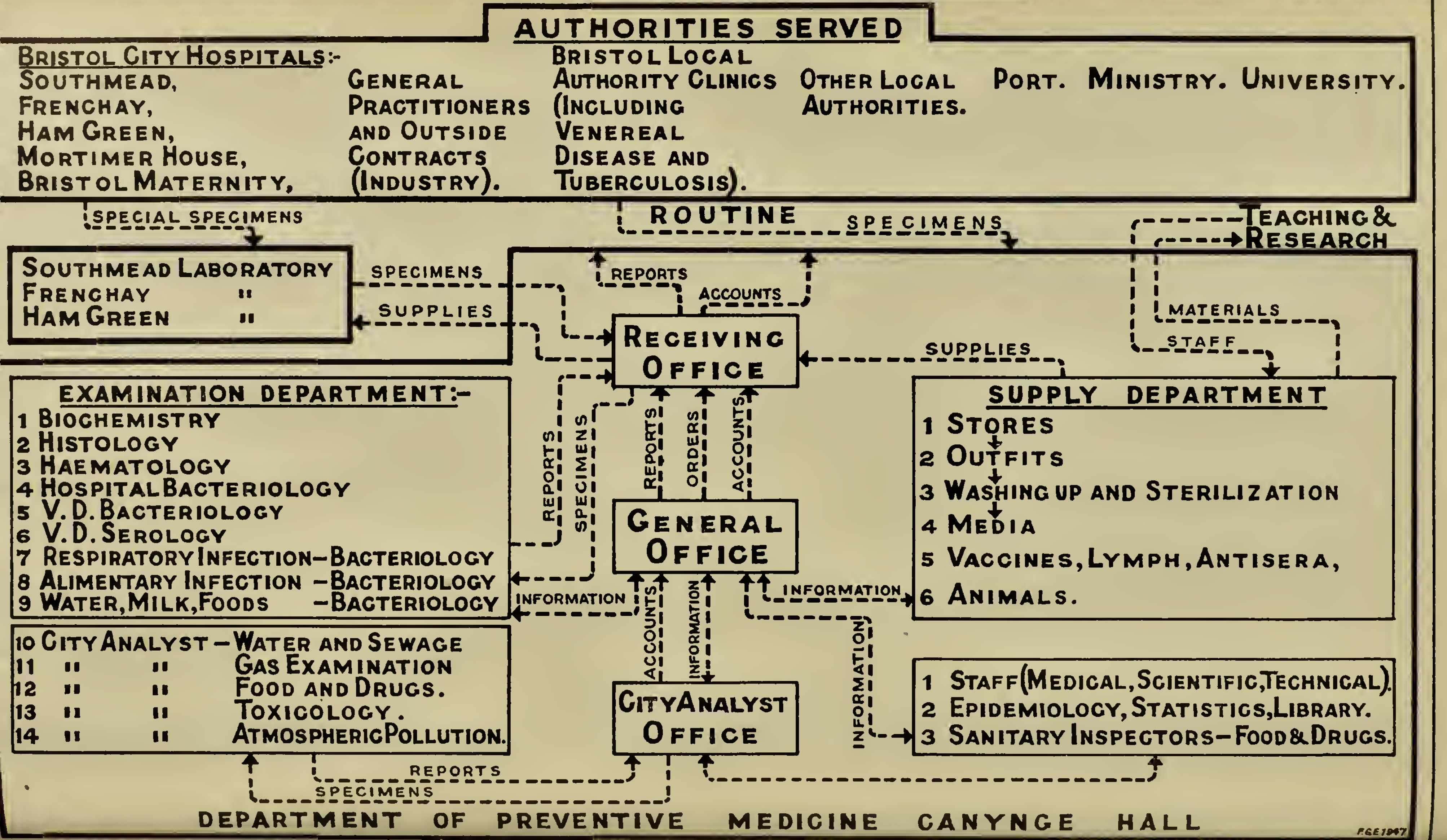
Particular attention has been paid during the year to the training of: —

(1) Medical Laboratory Technicians,

(2) Sanitary Inspectors.

Courses and examinations have been held, and a considerable contribution thus made towards alleviating acute shortage of staff in both these sections. The usual course in bacteriology for science students has been given, this year's class being the largest held. The additional strain on the department of this extended teaching has been mitigated to some extent by the appointment of a Lecturer in Bacteriology in the Department of Pathology who has taken over the teaching of medical undergraduates in this subject.

Little time has been left for research, but preliminary steps have been taken in the investigation of a number of problems which should be of benefit to the routine work of the laboratory. The University has made two additional appointments which have helped considerably—a bacteriologist, Miss Phillips, who has been responsible for the practical classes in bacteriology; and a biochemist, Mrs. Seymour, who is working at Ham Green Hospital doing research in collaboration with Dr. Peters.


AUTHORITIES SERVED
BRISTOL CITY HOSPITALS:-
SOUTHMEAD,
FRENCHAY,
HAM GREEN,
MORTIMER HOUSE,
BRISTOL MATERNITY,
GENERAL PRACTITIONERS AND OUTSIDE CONTRACTS (INDUSTRY).
BRISTOL LOCAL AUTHORITY CLINICS (INCLUDING VENEREAL DISEASE AND TUBERCULOSIS).
OTHER LOCAL AUTHORITIES.
PORT.
MINISTRY.
UNIVERSITY.
SPECIAL SPECIMENS
ROUTINE SPECIMENS
TEACHING &
RESEARCH
SOUTHMEAD LABORATORY
FRENCHAY "
HAM GREEN "
SPECIMENS
SUPPLIES
REPORTS
ACCOUNTS
MATERIALS
STAFF
RECEIVING OFFICE
SUPPLIES
EXAMINATION DEPARTMENT:-
1 BIOCHEMISTRY
2 HISTOLOGY
3 HAEMATOLOGY
4 HOSPITAL BACTERIOLOGY
5 V.D. BACTERIOLOGY
6 V.D. SEROLOGY
7 RESPIRATORY INFECTION—BACTERIOLOGY
8 ALIMENTARY INFECTION —BACTERIOLOGY
9 WATER, MILK, FOODS —BACTERIOLOGY
REPORTS
SPECIMENS
REPORTS
ORDERS
ACCOUNTS
GENERAL OFFICE
SUPPLY DEPARTMENT
1 STORES
2 OUTFITS
3 WASHING UP AND STERILIZATION
4 MEDIA
5 VACCINES, LYMPH, ANTISERA,
6 ANIMALS.
INFORMATION
INFORMATION
ACCOUNTS
INFORMATION
INFORMATION
10 CITY ANALYST — WATER AND SEWAGE
11 " " GAS EXAMINATION
12 " " FOOD AND DRUGS.
13 " " TOXICOLOGY.
14 " " ATMOSPHERIC POLLUTION.
CITY ANALYST OFFICE
1 STAFF (MEDICAL, SCIENTIFIC, TECHNICAL).
2 EPIDEMIOLOGY, STATISTICS, LIBRARY.
3 SANITARY INSPECTORS—FOOD & DRUGS.
REPORTS
SPECIMENS
DEPARTMENT OF PREVENTIVE MEDICINE CANYNGE HALL
F.G.E. 1947

WATERS, 1946	37°C. Count			22° C. Count			Presumptive Coli in 100 Ml.				Fæcal Coli Present	TOTAL
	0-100	100-1,000	> 1,000	0-200	200-1,000	> 1,000	0	1-10	10-100	> 100		
City mains, Bristol Water Co. ...	121	7	0	123	4	1	119	8	0	1	4*	128
Hospitals, W. Glos. Water Co. ...	49	6	3	51	7	0	53	5	0	0	2*	58
Hospitals, Portishead Water Co. ...	23	2	1	24	2	0	26	0	0	0	0	26
Lake Water (after treatment), Ham Green Hosp.	21	3	0	23	0	1	24	0	0	0	0	24
Bristol—other supplies—Wells, etc.	4	1	3	2	*One 22° C. count not done	5	1	3	2	2	4	8
Somerset—other supplies	5	0	2	3	1	3	1	3	1	2	5	7
Gloucester—other supplies	16	3	6	15	2	8	8	3	9	5	14	25
Wiltshire	2	0	1	1	0	2	0	1	1	1	2	3
Miscellaneous—ships, baths, etc. ...	1	0	0	1	0	0	0	1	0	0	0	1

* Local contamination in certain houses—not in main supply.

Appendix VI.

METEOROLOGICAL OBSERVATIONS, 1946.

By Mr. H. H. HARDING, meteorologist, Frampton Cotterell, near Bristol.

Results from Readings taken daily at 9 a.m. G.M.T.

Mean pressure (corrected)	29.949 inches.
Departure from average (34 years)	− 0.004 inches.
Greatest pressure at 9 a.m.	30.833 on Jan. 15th.
Least pressure at 9 a.m.	29.009 on Nov. 20th.
Total rainfall at Bishopston (St. Andrew's Park)	37.45 inches.
Departure from average (Clifton 39 years)	+ 2.36 inches.
Heaviest fall in 24 hours	1.54 inches on May 26th.
Total rainfall at Frampton Cotterell	37.15 inches.
Departure from average (34 years)	+ 5.63 inches.
Number of rainy days	205.
Departure from average (34 years)	+ 21.
Days with 0.04 inches or more	157.
Days with less than 0.04 inches	48.
Heaviest fall in 24 hours	1.65 inches on May 26th.
Mean humidity at 9 a.m.	83.5%.
Mean temperature (maximum 8 mins.)	49.8.
Departure from average (34 years)	+ 0.4.
Maximum temperature in screen	82.8 degrees on July 12th.
Minimum temperature in screen	16.2 degrees on Jan. 21st.
Minimum temperature on grass	12 degrees on Jan. 21st and Dec. 22nd.
Mean of warmest day	68.4 on July 10th.
Mean of coldest day	25.7 on Jan. 20th.
Hours of bright sunshine (estimated)	1,338 hours.
Departure from average (34 years)	− 203.
Days of bright sunshine	101.
Days entirely overcast	86.
Days with fog	26.
Days with thunder	14.
Days with snow	13.
Number of frosty nights	52.
Number of ground frosts	85.

Appendix VII.

SPECIALIST SERVICES IN BRISTOL

Report by Dr. R. H. PARRY, Medical Officer of Health.

A scheme was prepared in 1938 under which the Council obtained the services of teams of specialists in medicine and in surgery whereby the professors of medicine and surgery became responsible for the provision of such services to all hospitals under the control of the Health Committee. This scheme did not apply to the arrangements already made for special departments, *e.g.*, ear, nose and throat, eye, orthopædic, etc. In 1940 the scheme was extended to include obstetrics and radiology. Since that time, to meet the growth of the work, a full-time consulting radiologist has been appointed. The treatment of venereal disease is also under the control of a director and deputy director who are full-time officers of the Council.

During the year, the above arrangements became due for revision in the light of altered conditions prevailing. Three considerations necessitated this review of the present arrangements:—

(1) The need for a wider field of specialist services for Corporation hospitals, especially having regard to modern developments in knowledge and equipment.

(2) The provision for expanding services resulting from the introduction of a comprehensive school medical service, the extension of health clinic services and additional hospital facilities provided by the reception and treatment of patients at Frenchay Hospital—a recommendation had recently been approved for additional clinic sessions for medical, surgical, dermatological and pædiatric specialists to deal with the increased number of children who would be referred by the school medical officers and other authorised officers. Furthermore, the demands for consultants' advice at clinics have increased progressively in recent years, actual attendances of patients at the consultative ante-natal clinics alone in the city having reached a figure of 5,468 in 1945.

(3) The organisation of medical teaching in the University involving extended facilities for training an increased number of students.

Certain members of the medical profession taking part in the present arrangements became due for retirement, and the professors of the Faculties were less able to take part in supervision of Corporation services because of increased teaching duties in the University. A Joint Advisory Committee on Medical Appointments on which the City Council, the University and voluntary hospitals are represented, has been constituted, and has devoted considerable time and thought to consideration of principles and procedure regarding appointments to hospital and clinic staffs.

The proposals set out received the approval of the Council in July, and are based on the principles recommended by the Joint Advisory Committee and set out at the end of this report, the acceptance of which implies that appointments will all be joint appointments by bodies represented on the Joint Advisory Committee.

As far as the hospitals and health centres under the control of the Health Committee are concerned, the appointment of the following medical staff was authorised to enable the arrangements to be put into operation:—

(1) General Medicine.

Three teams, each consisting of—
2 consultant physicians
1 registrar
2 house physicians.

The consultant physicians and registrars to be new joint appointments and the house officer posts to be covered by present resident staff.

Each unit will be responsible for 40 general medical beds and for 80 long-stay beds at Southmead, Snowdon and Frenchay Hospitals, the allocation of the period of time during which the three teams will be engaged and the particular duties upon which they will be employed being the subject of detailed consideration by the Joint Committee.

(2) General Surgery.

Three teams, each consisting of—
- 2 consultant surgeons
- 1 registrar
- 2 house surgeons.

The consultant surgeons and registrars being new joint appointments.

Each unit will be responsible for beds allocated similarly to, but fewer in number than, the medical department, the Royal Hospital beds being pooled with those of the Health Committee's hospitals.

With the termination of existing arrangements, the engagement of specialist staff on the new basis became one of urgency in these two departments and the Council were asked to approve the scheme in principle and to authorise the appointment of staff for these departments without waiting for submission of the completed scheme which depended on negotiations proceeding with the University and the Royal Hospital in relation to the following special departments:—

Orthopædics.

Mr. Chitty, the orthopædic surgeon, retires in 1947 and it was necessary to reorganise the orthopædic service before that date. The proposals in connection with this matter formed the subject of a separate report to Council.

The policy to be adopted in connection with orthopædic cases has been the subject of consideration and consultation between the Health Committee and the Committee of Winford Orthopædic Hospital. In the interests of the patients, the more efficient operation of the service and the economical use of the services of the specialists available it is desirable that the treatment of such cases should be concentrated in one hospital. At Southmead Hospital there were 45 beds allocated for orthopædic treatment and there were 40 beds at Frenchay Park Sanatorium for tubercular children requiring this type of treatment. In future beds will be available for the treatment of city cases at Winford Hospital and the Corporation hospitals will cease to admit this type of patient. The payment for treatment will be based on the maintenance costs of the hospital in the same manner as the Education Committee pay for the treatment of children sent by them to Winford Hospital and the payment to the specialists will be on the same basis as that which will be agreed for the medical treatment of school children under the scheme of the Education Committee.

As far as Southmead Hospital is concerned the arrangements outlined above began to operate forthwith. Cases were not, however, to be transferred from Southmead Hospital, but no further cases were to be admitted and new cases were to be admitted to Winford. It was therefore necessary to make temporary arrangements for specialist treatment from the date of Mr. Chitty's retirement up to the time when no more cases are left for treatment in the Corporation hospitals.

Ear, Nose and Throat.

The agreed principles will be applied to the ear, nose and throat department in a scheme to be formulated to cover school, medical and hospital work.

Genito Urinary.

The team principle will need to be applied to the genito-urinary surgery department.

Other Services.

Obstetrics and gynæcology, pædiatrics, thoracic surgery, and neurosurgery are other departments which will also need to be dealt with in a future supplementary report after consultations with the voluntary hospitals concerned.

There are three other departments for which schemes were under consideration during the year, but consultations having not yet been completed it was desirable, as a matter of urgency, to have the approval of the Council to proposed interim appointments:—

Anæsthetics.

It has been agreed with the Faculty of the Royal Hospital that this department requires organising on the principle that anæsthetics shall be given by specially trained persons only, the following appointments being necessary:—

(a) A resident anæsthetist at Southmead Hospital.

(b) A part-time registrar, subject to consideration being given at the end of six months to making the appointment full-time.

The staff to be available also for the other city hospitals and they will be at the disposal and under the supervision of the head of the department of anæsthetics. Honorary anæsthetists of the Royal Hospital will remain available on a sessional basis for work at Southmead Hospital as in the past.

Dermatology.

The services of a team of dermatologists is required for the public health and school medical service. The beds will be provided at the Bristol Royal Hospital, and the establishment of out-patient skin clinics at Southmead Hospital and the Central Health Clinic are contemplated.

An extension of the service will be considered at a later date, with a view to the allocation of beds at Frenchay Hospital.

Radiology.

The reorganisation of the radiological services has been approved in principle by the Joint Advisory Committee and will be discussed further before final recommendations are made. Teaching facilities for medical students and the supervision of postgraduate studies for the Diploma in Radiology will need to be inaugurated.

There is, however, immediate need for an increase in the present staff, due mainly to the opening of the thoracic unit at Frenchay Hospital.

The appointment of a further full-time radiologist will be necessary, pending revision of the existing arrangements for radiological services.

The Council approved the arrangements made with the Joint Advisory Committee for the provision of specialist services, jointly with the University and voluntary hospitals, upon a team basis; authorised the appointment of the necessary medical personnel to form the general medical and general surgical teams, the appointment of the anæsthetic, dermatology and radiological staff referred to in the report, and authorised the continuation of negotiations relating to the other specialist services referred to.

Joint Advisory Committee on Medical Appointments.

Reference was made in my annual report last year to the establishment of a Joint Advisory Committee on medical appointments and the constitution and lines of procedure were outlined. The constitution has since been revised. This revision has received the approval of the Health Committee who appointed the chairman, the vice-chairman, Mr. Wright and Dr. Parry to be their representatives to serve upon the Joint Advisory Committee. The constitution is now as follows:—

1. There shall be a Joint Committee for clinical appointments of all grades, with the exception of house appointments and clinical assistants, to the staffs of the hospitals in the medical teaching centre and to the staff of the University.

2. All vacancies as they arise and all proposals for the creation of new posts shall, at the earliest practicable stage and before any steps to fill the posts are taken, be referred to the Joint Committee for consideration.

3. The power of appointment shall in all cases remain vested in the governing body of the institution or institutions affected and, except for cases where more than one institution is directly affected and for vacancies for registrarships, the governing body of the institution concerned shall issue any advertisement that may be decided upon and receive in the first instance the applications submitted.

4. Where an appointment directly affects more than one institution, an agreed advertisement shall be issued for that appointment and all vacancies for registrarships shall be issued by the University.

5. All applications for appointment shall be referred to the Joint Committee for consideration.

6. The Joint Committee shall:—

   (a) make recommendations to the institution or institutions affected on any matter affecting a post which is vacant or to be created, including amongst other relevant matters the qualifications and experience to be looked for and the terms and conditions to be attached to the appointment;

   (b) consider all the applicants for any post and decide upon the candidate or candidates worthy of interview;

   (c) provided that the representatives of the institution or institutions directly affected and present at the meeting concerned concur in such a course, make arrangements for the interview by or on behalf of the Joint Committee of selected candidates for an appointment;

   (d) make recommendations in regard to the manner in which appointments directly affecting more than one institution shall be advertised and selected candidates for such appointments interviewed;

   (e) subject to the terms of paragraph 3 above, make any recommendations and take all appropriate steps with the object of securing amongst the institutions concerned a comprehensive and adequate staff suited to the needs of a medical teaching centre;

   (f) The Committee shall be responsible for determining its own procedure and shall have power to invite to any of its meetings any persons who. in the opinion of the Committee, may assist it in the performance of its duties.

7. The Joint Committee shall consist of the following members:—
   Four nominated by the City Council.
   Two ,, ,, Eye Hospital.
   Four ,, ,, Bristol Royal Hospital.
   Two ,, ,, Royal Hospital for Sick Children and Women.
   Four ,, ,, University.

   The Vice-Chancellor for the time being of the University, who shall be the chairman of the Committee.

8. The secretary to the Joint Committee, to whom all communications intended for the Joint Committee shall be addressed, shall be the secretary for the time being of the University.

Certain general principles regarding specialists' appointments have also been adopted:—

1. The unit be the clinical " team," which normally shall consist of two members of the visiting staff (one of whom shall be senior), a registrar, house officer and clinical assistants.

2. Where the work of a Department or Speciality calls for more than one team each team shall be equal in status.

3. Subject to the general supervision of the teaching by the University professors of heads of departments, each team shall be entirely responsible for its clinical work.

4. Registrars should be appointed to the team and not to the department.

5. Out-patient consulting sessions should be held at the Royal Hospital by all the teams. The members of all teams shall be on the Royal Hospital medical staff; whether or not they have beds in the hospital.

6. The beds of a team shall, as far as is practicable, be in one hospital.

Appendix VIII.

REPORT ON THE PREMATURE BABY UNIT, SOUTHMEAD HOSPITAL

By Dr. BERYL D. CORNER and Dr. GRETA HARTLEY,
Pædiatricians to Southmead Hospital

This unit was opened on January 11th, 1946, to accommodate seven babies in a room with controlled temperature and humidity, their mothers being nursed in an adjacent wing of the maternity department. Arrangements were made for a team of nurses to devote their whole time to the care of these babies. During the year 118 babies were admitted, but the demand was so great that admission was restricted to babies weighing 5lb. or less at birth; for exceptional medical reasons a few slightly larger premature babies were admitted. In August, a second room, without special heating, was made available to the unit so that all babies could spend some time in this cooler room before discharge. This allowed accommodation for twelve babies but, even so, it was found to be insufficient, so that admission was refused to a number of small babies born in the hospital, and at times fifteen infants were nursed in the unit in somewhat overcrowded conditions. It has only been possible to admit a very small number of babies born outside the hospital.

In presenting this report of the statistics for the year's work, the figures have been divided into two six-monthly periods. The first six months may be considered to be an experimental period, during which equipment was tried out and the nursing staff gained experience in the highly skilled technique needed. The biggest factor in successful rearing of these infants is an adequate and skilled nursing staff. As the work is most exacting, considerable training and experience are needed before the nurses are able to take the necessary responsibility, and undoubtedly work has been hampered by lack of sufficient nurses willing to remain long enough in the unit to gain the necessary skill. A special tribute, however, must be paid to the devotion of the sister-in-charge of the unit. It is hoped to start a scheme of special training in premature baby care as soon as possible.

Emphasis has been laid on the importance of breast-feeding and it is noteworthy than 62% of babies left the hospital fully breast-fed. In addition, every mother has been taught to handle her baby completely for several days before she leaves hospital. Babies have only been discharged on reaching the weight of 5lb., which has necessitated detaining the mothers in hospital considerably longer than usual, the minimum stay being about three weeks. In the case of the artificially fed infants, experience has shown that these would have benefited by a longer stay in the unit, and detailed information concerning the home conditions would be of great value before discharge of the infants.

There has been a steady improvement during the year in the survival rate of the smaller babies. The smallest surviving infant had a birthweight of 1lb. 12oz. and made steady progress. There were two outbreaks of infection during the year—one slight epidemic of gastro-enteritis and another of pemphigus neonatorum. Both were controlled fairly rapidly and the incidence of infection otherwise has been negligible.

The work of this unit is only the first stage in the reduction of the infant mortality rate from prematurity. Experience shows that, if full benefit is to be obtained, special after-care arrangements are needed for these infants during the 2—3 months after discharge from hospital. Plans are being prepared for special follow-up clinics.

PREMATURE BABY UNIT, SOUTHMEAD HOSPITAL.
1946.

	Jan. 11—June 30	June 30—Dec. 31	Yearly Total
Admissions from hospital and district	58	60	118
Born in the hospital	53	60	113
Admitted from district	5	—	5
Deaths	28	16	44
Discharged	30	44	74

Causes of Death.

Intracranial injury (including 3 fractured skulls, 1 case complicated by meningitis, 1 case complicated by hæmolytic disease of new-born) ...	16
Atelectasis	7
Prematurity	2
Congenital malformations	3
Infections: —	
Gastro-enteritis	4
Pneumonia	3
Pyelo-nephritis	1
Pemphigus	1
Abortions, non-viable	2
Congenital syphilis	1
Pulmonary hæmorrhage, complicating hæmolytic disease of the new-born ...	1
Admitted moribund from district	2
Cause unknown	1
	44

Causes of Death and Age at Death for each Birth-Weight Group.

Cause	Week of Life	Under 2 lb.	2—2½ lb.	2½—3 lb.	3—3½ lb.	3½—4 lb.	4—5 lb.	Over 5 lb.	All Weights
Intracranial injury	1	–	2	2	4	1	3	2	14
	2	–	–	1	–	–	1	–	2
	3	–	–	–	–	–	–	–	–
	4	–	–	–	–	–	–	–	–
Atelactasis	1	–	1	1	1	–	1	–	4
	2	–	–	1	–	1	1	–	3
	3	–	–	–	–	–	–	–	–
	4	–	–	–	–	–	–	–	–
Prematurity	1	–	1	–	–	–	–	–	1
	2	–	1	–	–	–	–	–	1
	3	–	–	–	–	–	–	–	–
	4	–	–	–	–	–	–	–	–
Congenital Malformations	1	–	–	–	–	1	1	–	2
	2	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	1	1
	4	–	–	–	–	–	–	–	–
Infections	1	–	–	–	–	2	–	–	2
	2	1	1	–	–	–	–	–	2
	3	–	–	–	–	2	1	–	3
	4	–	–	1	–	–	–	–	1
	5	–	–	–	–	–	–	–	–
	6	–	–	–	–	–	1	–	1
	7	–	–	–	1	–	–	–	1
Abortions (non-viable)	1	1	1	–	–	–	–	–	2
Congenital Syphilis	6	–	–	–	–	–	1	–	1
Pulmonary Hæmorrhage	1	–	–	–	–	1	–	–	1
Other causes	1	–	–	1	–	–	1	–	2
	8	–	–	–	1	–	–	–	1
Total Deaths		2	7	7	6	8	11	3	44
Total Live Births		2	8	11	13	17	55	11	118

Neo-natal Mortality according to Birth-Weight (pounds).

Birth-Weight	Jan. 11—June 30			June 30—Dec. 31			Mortality per cent.
	Cases	Died	Discharged Alive	Cases	Died	Discharged Alive	
Under 2 lb.	1	1	—	2	1	1	66%
2 —2½ lb.	3	3	—	5	4	1	87.5%
2½—3 lb.	7	6	1	4	1	3	63.6%
3 —3½ lb.	6	6	—	7	—	7	46.2%
3½—4 lb.	6	3	3	11	5	6	47%
4 —5 lb.	30	7	23	25	4	21	20%
Over 5 lb.	5	2	3	6	1	5	27.3%
All weights	57	27	30	60	16	44	37%

Mortality Rate January to June = 47%
,, ,, July to December = 26.6%

Appendix IX.

A.—VITAL STATISTICS.

Table 1.—*Supplied by the Registrar General.*

Population, marriages, births, deaths, natural increase, infant mortality, for Calendar year 1946 and previous seven years.—Bristol.

	1946	1945	1944	1943	1942	1941	1940	1939
Estimated civilian population (mid year)	417,090	414,320	405,530	370,800	362,200	360,150	411,400	419,200
Marriages.								
Number	3,818	3,919	3,071	3,123	4,131	4,125	5,099	4,860
Rate per 1,000 population ...	18.31	18.92	15.15	16.8	22.8	22.9	24.79	23.19
Births.								
Legitimate—males	3,913	3,352	3,726	3,369	3,164	2,614	3,180	3,106
females	3,621	3,078	3,492	3,082	2,956	2,516	2,973	2,929
Illegitimate—males	255	301	290	214	158	113	100	98
females ...	252	296	259	220	144	136	110	86
Total	8,041	7,027	7,767	6,885	6,422	5,379	6,363	6,219
Rate per 1,000 population ...	19.28	16.96	19.15	18.57	17.73	14.94	15.47	14.84
Stillbirths.								
Legitimate—males	117	78	115	101	123	88	117	133
females	86	81	85	97	96	82	103	108
Illegitimate—males	8	9	15	5	8	5	4	8
females ...	6	9	3	6	3	8	4	4
Total	217	177	218	209	230	183	228	253
Rate per 1,000 total births ...	26	25	27	29	34	33	35	39
Deaths.								
Males	2,424	2,387	2,308	2,327	2,203	2,841	3,176	2,576
Females	2,473	2,418	2,149	2,271	2,162	2,772	3,240	2,578
Total	4,897	4,805	4,457	4,598	4,365	5,613	6,416	5,154
Rate per 1,000 population ...	11.75	11.60	10.99	12.40	12.05	15.59	15.60	12.29
Natural increase per 1,000 population	7.54	5.36	8.16	6.17	5.68	*decrease .65*	*decrease .13*	2.55
Deaths under 1 year.								
Legitimate	273	208	244	290	221	253	336	240
Rate per 1,000 legit. births ...	36	32	34	45	36	49	55	40
Illegitimate	26	37	24	23	14	37	22	21
Rate per 1,000 illegit. births	51	62	44	53	46	149	105	114
Total deaths	299	245	268	313	235	290	358	261
Rate per 1,000 births	37	35	35	45	37	54	56	42
Deaths under 1 month.								
Total deaths	192	140	143	191	167	138	196	147
Rate per 1,000 live births ...	24	20	18	28	24	27	30	21
Diarrhœa and enteritis— (under two years)								
Deaths	25	22	33	31	9	25	42	22
Rate per 1,000 live births ...	3.1	3.1	4.2	4.5	1.25	4.7	6.6	3.5
Maternal mortality.								
Deaths from puerperal sepsis...	2	3	3	2	2	2	5	4
Rate per 1,000 total births ...	0.24	0.42	.37	.28	.30	.37	.76	.62
Deaths from other puerperal causes	16	6	7	8	11	5	13	15
Rate per 1,000 total births ...	1.94	0.83	.88	1.13	1.80	0.92	1.97	2.31
Total deaths from puerperal causes	18	9	10	10	13	7	18	19
Rate per 1,000 total births ...	2.18	1.25	1.25	1.41	2.10	1.29	2.73	2.93

Table 2.—Supplied by the Registrar General.

Birth-rates, death-rates, infant mortality, maternal mortality and case-rates for certain infectious diseases in the year 1946.

(Provisional figures based on weekly and quarterly returns).

	Bristol	England and Wales	126 County Boroughs and great towns including London	148 Smaller towns (resident populations 25,000 to 50,000 at 1931 Census)	London Administrative County
	*Rates per 1,000 civilian population.				
BIRTHS :					
Live	19.28	19.1 (A)	22.2	21.3	21.5
Still	0.52	0.53(A)	0.67	0.59	0.54
DEATHS :					
All causes	11.75	11.5 (A)	12.7	11.7	12.7
Typhoid and para-typhoid fevers ...	—	0.00	0.00	0.00	0.00
Smallpox	—	0.00	0.00	0.00	—
Measles	—	0.00	0.01	0.00	0.01
Scarlet fever	—	0.00	0.00	0.00	0.00
Whooping cough ...	0.009	0.02	0.02	0.02	0.02
Diphtheria	0.007	0.01	0.01	0.01	0.01
Influenza	0.127	0.15	0.13	0.14	0.12
Notifications :					
Smallpox	—	0.00	0.00	0.00	0.00
Scarlet fever	1.36	1.38	1.51	1.33	1.42
Diphtheria	0.09	0.28	0.32	0.31	0.24
Enteric fever	0.01	0.03	0.03	0.02	0.02
Erysipelas	0.20	0.22	0.25	0.22	0.27
Pneumonia	1.24	0.89	1.02	0.74	0.75
Measles	0.73	3.92	4.73	3.70	7.35
Whooping cough ...	1.69	2.28	2.48	2.05	2.22
Cerebro-spinal meningitis	0.07	0.05	0.05	0.04	0.06
	Rates per 1,000 live births.				
Deaths under 1 year of age	37	43 (B)	46	37	41
Deaths from diarrhœa and enteritis under 2 years of age ...	3.1	4.4	6.1	2.8	4.2
MATERNAL MORTALITY :					
Puerperal sepsis ...	0.25	Not available			
Others	1.99				
Total	2.24				
	Rate per 1,000 total births (i.e., live and still).				
MATERNAL MORTALITY :					
Puerperal sepsis ...	0.24	0.31			
Others	1.94	1.12			
Total	2.18	1.43			
NOTIFICATIONS :					
Puerperal fever ... Puerperal pyrexia ...	13.20	8.50	10.35	7.63	1.62 9.68(C)

* A dash (—) signifies that there were no deaths.

(A) = Rates per 1,000 TOTAL population.

(B) = Per 1,000 related births.

(C) = Including puerperal fever.

Table 3.

Compiled from figures supplied by Registrar General.

Total deaths by cause and age during the calendar year 1946.—Bristol.

CAUSES OF DEATH	Sex	All Ages	0—1	1—5	5—15	15–45	45–65	65+
ALL CAUSES	M.	2,424	177	22	21	186	679	1,339
	F.	2,473	122	21	20	227	531	1,552
1. Typhoid & paratyphoid fevers	M.	–	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–
2. Cerebro-spinal fever ...	M.	2	–	–	–	–	2	–
	F.	1	–	–	–	–	1	–
3. Scarlet fever	M.	–	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–
4. Whooping cough	M.	3	3	–	–	–	–	–
	F.	1	1	–	–	–	–	–
5. Diphtheria	M.	2	–	–	1	1	–	–
	F.	1	–	–	1	–	–	–
6. Tuberculosis of respiratory system	M.	135	1	2	1	55	60	16
	F.	101	1	2	2	71	17	8
7. Other forms of Tuberculosis	M.	15	1	4	4	2	2	2
	F.	15	1	2	4	7	1	–
8. Syphilitic disease	M.	22	–	–	–	2	14	6
	F.	7	1	–	–	1	4	1
9. Influenza	M.	26	2	–	1	–	12	11
	F.	27	1	2	–	3	7	14
10. Measles	M.	–	–	–	–	–	–	–
	F.	–	–	–	–	–	–	–
11. Acute poliomyelitis & polio-encephalitis	M.	–	–	–	–	–	–	–
	F.	1	–	–	–	1	–	–
12. Acute infectious encephalitis	M.	2	–	–	–	1	1	–
	F.	2	–	–	–	1	1	–
13. Cancer of buccal cavity and œsophagus	M.	26	–	–	–	1	5	20
13. Cancer of uterus	F.	47	–	–	–	2	24	21
14. Cancer of stomach and duodenum	M.	73	–	–	–	3	31	39
	F.	67	–	–	–	–	27	40
15. Cancer of breast	M.	1	–	–	–	–	–	1
	F.	77	–	–	–	5	39	33
16. Cancer of all other sites ...	M.	269	–	–	1	16	103	149
	F.	211	1	2	–	20	75	113
17. Diabetes	M.	18	–	–	–	1	3	14
	F.	17	–	–	–	3	3	11
18. Intra-cranial vascular lesions	M.	218	–	–	–	2	43	173
	F.	320	–	–	–	3	75	242
19. Heart disease	M.	646	–	–	–	12	168	466
	F.	737	–	–	1	26	99	611
20. Other diseases of circulatory system	M.	59	–	–	–	3	15	41
	F.	81	–	–	–	1	11	69
21. Bronchitis	M.	148	2	–	–	8	47	91
	F.	136	3	–	1	4	22	106
22. Pneumonia	M.	124	25	4	1	7	32	55
	F.	104	25	3	–	2	20	54
23. Other respiratory diseases ...	M.	40	1	–	–	5	20	14
	F.	26	–	–	–	4	8	14
24. Ulceration of stomach and duodenum	M.	47	–	–	–	7	22	18
	F.	12	–	–	–	–	4	8
25. Diarrhœa (under 2 years of age)	M.	16	16	–	–	–	–	–
	F.	9	7	2	–	–	–	–
26. Appendicitis	M.	5	–	1	–	–	3	1
	F.	6	–	–	–	3	1	2
27. Other digestive diseases ...	M.	44	1	1	2	2	12	26
	F.	53	1	–	–	4	14	34
28. Nephritis	M.	71	–	–	–	11	20	40
	F.	65	–	–	1	6	22	36
29. Puerperal and post-abortive sepsis	F.	2	–	–	–	2	–	–
30. Other maternal causes ...	F.	16	–	–	–	16	–	–
31. Premature birth	M.	55	55	–	–	–	–	–
	F.	30	30	–	–	–	–	–
32. Congenital malformations, birth injury, infantile disease	M.	75	65	–	–	8	1	1
	F.	56	45	1	2	3	5	–
33. Suicide	M.	15	–	–	–	4	3	8
	F.	24	–	–	–	10	6	8
34. Road traffic accidents ...	M.	37	–	3	3	11	8	12
	F.	11	–	2	1	4	–	4
35. Other violent causes ...	M.	41	–	5	4	10	10	12
	F.	53	1	1	1	4	5	41
36. All other causes	M.	189	5	2	3	14	42	123
	F.	157	4	4	6	21	40	82

Table 4.

Compiled from figures supplied by Registrar General.

Principal causes of death during calendar year 1946.—Bristol.

Death Rate per 1,000	DISEASE	Net deaths in 1946	% to total deaths
—	Typhoid and paratyphoid fevers	—	—
0.007	Cerebro-spinal fever	3	.06
—	Scarlet fever	—	—
0.009	Whooping cough	4	.08
0.007	Diphtheria	3	.06
0.566	Tuberculosis of respiratory system	236	4.82
0.072	Other forms of tuberculosis	30	.61
0.070	Syphilitic disease	29	.59
0.127	Influenza	53	1.08
—	Measles	—	—
0.002	Acute poliomyelitis and polio-encephalitis	1	.02
0.009	Acute infectious encephalitis	4	.08
0.062	Cancer of buccal cavity and oesophagus	26	.53
0.113	Cancer of uterus	47	.96
0.336	Cancer of stomach and duodenum	140	2.86
0.187	Cancer of breast	78	1.59
1.151	Cancer of all other sites	480	9.80
0.084	Diabetes	35	.71
1.289	Intra cranial vascular lesions	538	10.99
3.316	Heart disease	1,383	28.24
0.336	Other diseases of circulatory system	140	2.86
0.681	Bronchitis	284	5.80
0.547	Pneumonia	228	4.66
0.158	Other respiratory diseases	66	1.35
0.141	Ulceration of stomach and duodenum	59	1.20
0.060	Diarrhœa	25	.51
0.026	Appendicitis	11	.22
0.233	Other digestive diseases	97	1.98
0.326	Nephritis	136	2.78
0.005	Puerperal and post-abortive sepsis	2	.04
0.038	Other maternal causes	16	.33
0.204	Premature birth	85	1.74
0.314	Congenital malformations, birth injury, infantile disease	131	2.68
0.094	Suicide	39	.80
0.115	Road traffic accidents	48	.98
0.225	Other violent causes	94	1.92
0.830	All other causes	346	7.07
11.75	ALL CAUSES	4,897	

Table 5.

POPULATION, BIRTH-RATES, DEATH-RATES, MATERNAL MORTALITY, ETC., IN 15 LARGE TOWNS

for the year 1946

Name of Town	Population as estimated by Registrar-General Mid.1946	Per 1,000 Population		Death Rates per 1,000 population from :—									Diarrhœa under 2 years. Per 1,000 Live Births	Infantile Mortality Rate	Maternal Mortality per 1,000 total births.		
											Tuberculosis						
		Birth Rate	Death Rate	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Typhoid & Paratyphoid Fever	Influenza	Cancer	Pulmonary	Other forms			From Sepsis	From Other Causes	Total
BIRMINGHAM* ...	1,063,000	22.3	11.3	0.01	—	0.03	0.01	0.00	0.11	1.90	0.61	0.07	6.2	41	0.13	0.73	0.86
BRADFORD ...	279,040	20.9	14.4	0.00	0.00	0.02	0.02	0.00	0.14	2.31	0.46	0.07	4.3	45	0.00	0.02	0.02
BRISTOL	**417,090**	**19.28**	**11.75**	**—**	**—**	**0.01**	**0.01**	**—**	**0.13**	**1.85**	**0.57**	**0.07**	**3.11**	**37**	**0.24**	**1.94**	**2.18**
CARDIFF	224,450	22.2	12.1	—	—	0.02	—	—	0.05	1.72	0.73	0.15	8.1	44	0.58	1.16	1.74
COVENTRY ...	233,850	22.4	10.0	0.008	—	0.03	0.01	—	0.08	1.52	0.58	0.09	12.07	54	0.01	0.02	0.03
LEEDS	481,570	20.5	13.7	0.00	—	0.03	0.01	0.00	0.10	1.99	0.54	0.06	5.36	41	0.39	0.79	1.18
LEICESTER ...	269,320	21.0	12.2	0.00	—	0.01	0.003	—	0.09	1.87	0.60	0.09	13.26	54	—	1.06	1.06
LIVERPOOL ...	734,620	25.2	13.2	0.03	0.00	0.05	0.03	0.00	0.09	1.78	0.79	0.10	8.7	74	0.10	0.89	0.99
MANCHESTER ...	668,660	20.89	13.52	0.00	—	0.05	0.02	0.00	0.16	1.92	0.69	0.10	11.95	64	0.35	1.25	1.60
NEWCASTLE ...	283,740	21.4	12.4	0.007	—	0.04	0.06	—	0.08	1.95	0.78	0.14	2.80	41	0.16	0.48	0.64
NOTTINGHAM ...	283,160	22.05	12.5	0.02	0.00	0.02	0.02	—	0.14	1.87	0.61	0.10	2.26	42	0.48	0.64	1.12
PORTSMOUTH ...	204,540	23.69	12.13	0.00	—	0.01	—	—	0.07	1.96	0.57	0.09	2.11	34	0.40	0.60	1.00
SHEFFIELD ...	500,400	20.1	12.3	—	0.00	0.03	0.006	0.00	0.10	1.87	0.536	0.066	5.27	36	0.19	0.39	0.58
STOKE-ON-TRENT	264,820	22.2	12.1	0.00	0.00	0.03	0.026	0.00	0.253	1.88	0.621	0.098	9.02	55	0.00	0.66	0.66
SUNDERLAND ...	175,820	23.6	12.5	0.03	0.00	0.02	0.03	0.00	0.16	1.74	0.74	0.14	11.81	59	0.47	0.47	0.94

*(Based on Housing Survey, May—August, 1946)

Table 6.

Notifiable Diseases during 1946 (including **Port** cases). **Local Figures.**

NOTIFIABLE DISEASES.	NOTIFICATIONS.								REMOVED TO HOSPITAL		Notified in each quarter.				Attack rate per 1,000 Population	DEATHS (Corrected for transfers.)								
	At all ages	At ages—years :														All ages	At ages—years :							
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	No.	%	1st	2nd	3rd	4th			Under 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards
Diphtheria	39	—	10	23	3	3	—	—	38	97.4	9	4	5	21	0.09	3	—	—	—	2	—	1	—	—
Erysipelas	82	1	1	2	5	19	32	22	49	59.8	20	14	24	24	0.20	—	—	—	—	—	—	—	—	—
Scarlet fever	567	1	125	342	68	27	3	1	432	76.2	170	166	108	123	1.36	—	—	—	—	—	—	—	—	—
Enteric fever	1	—	—	—	1	—	—	—	1	100.0	—	1	—	—	0.002	—	—	—	—	—	—	—	—	—
Para-typhoid	3	—	—	1	2	—	—	—	3	100.0	—	—	2	1	0.007	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	28	5	11	3	4	1	4	—	21	75.0	7	9	4	8	0.067	3	—	—	—	—	—	—	3	—
Poliomyelitis	7	—	1	3	1	2	—	—	6	85.7	2	2	3	—	0.016	1	—	—	—	—	1	—	—	—
Pneumonia	519	48	77	59	31	88	114	102	313	60.3	276	107	43	93	1.24	228	49	4	3	1	1	9	52	109
Malaria	26	—	—	—	4	19	3	—	15	57.7	8	9	8	1	0.06	—	—	—	—	—	—	—	—	—
Dysentery	114	6	20	44	15	17	6	6	50	43.9	57	33	8	16	0.27	—	—	—	—	—	—	—	—	—
Encephalitis lethargica ...	1	—	—	—	—	—	1	—	—	—	—	1	—	—	0.002	3	—	—	—	—	—	2	1	—
Polio-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal pyrexia ...	109	—	—	—	43	65	1	—	8	7.3	29	23	27	30	0.26	2	—	—	—	—	—	2	—	—
Ophthalmia neonatorum	6	6	—	—	—	—	—	—	1	16.6	—	3	1	2	0.01	—	—	—	—	—	—	—	—	—
Measles	303	19	164	104	11	4	1	—	53	17.5	16	49	44	194	0.73	—	—	—	—	—	—	—	—	—
Whooping cough ...	705	93	422	177	3	10	—	—	127	18.0	233	275	137	60	1.69	4	4	—	—	—	—	—	—	—

Table 7.

Tuberculosis (including **Port** cases). Local Figures.

	CASES.																	DEATHS. (Corrected for transfers.)												
	At all ages	Under 1	1–	5–	10–	15–	20–	25–	35–	45–	55–	65+	Quarters				Case rate per 1,000 Popu'tn	At all ages	Under 1	1–	5–	10–	15–	20–	25–	35–	45–	55–	65+	Death rate
													1st	2nd	3rd	4th														
Pulmonary tuberculosis Cases notified	499	1	11	22	18	92	76	99	71	58	37	14	122	143	118	116	1.44	237	1	3	...	3	16	19	49	41	40	39	26	0.57
Other cases*	100	...	1	2	1	3	18	26	17	11	10	11	19	36	26	19														
Non-pulmonary tuberculosis Cases notified	68	...	12	15	6	8	6	10	4	2	4	1	13	17	13	25	0.22	28	3	7	4	4	3	2	2	...	1	1	1	0.07
Other cases*	25	3	4	1	4	1	5	5	...	...	1	1	9	8	4	4														
Total 1946	692	4	28	40	29	104	105	140	92	71	52	27	163	204	161	164	1.66	265	4	10	4	7	19	21	51	41	41	40	27	0.64
Total 1945	632	4	29	41	28	85	96	136	75	55	58	25	173	168	138	153	1.53	297	4	11	3	10	15	32	53	55	41	54	19	0.72
1944	648	3	19	27	35	97	103	119	108	71	42	24	165	177	167	139	1.60	256	3	8	4	1	15	32	53	49	34	37	20	0.63
1943	717	10	16	29	31	90	122	161	96	87	53	22	202	169	160	186	1.98	305	10	14	7	3	22	29	66	49	48	42	15	0.82
1942	587	4	12	10	30	29	59	113	103	94	78	55	153	152	128	154	1.62	264	6	11	3	6	2	21	30	42	53	47	43	0.70
1941	588	7	33	30	21	89	80	113	91	71	37	16	144	167	121	156	1.63	310	5	11	7	4	29	32	65	60	43	35	19	0.86
1940	564	5	40	44	20	81	65	113	85	57	35	19	157	179	120	108	1.37	273	2	16	4	3	24	36	44	47	52	36	9	0.66
1939	567	4	33	43	33	68	75	105	77	66	43	20	154	155	134	124	1.35	313	3	8	4	8	21	25	57	72	54	41	20	0.75
1938	666	4	31	68	42	80	88	131	95	69	41	17	210	170	133	153	1.59	270	1	7	4	2	27	32	65	50	49	22	11	0.64

* Cases coming to the knowledge of the M.O.H. otherwise than by notification.

Table 8.

1946.

INFANT MORTALITY. (Corrected for transfers) Local Figures.

Total	CAUSE OF DEATH	Under one day	Under one week	Weeks			Total under one month	Months											Total	Deaths in Quarters			
1945				1-2	2-3	3-4		1	2	3	4	5	6	7	8	9	10	11	1946	1st	2nd	3rd	4th
...	Chicken pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	Whooping Cough	...	...	...	...	...	...	1	1	...	...	...	1	...	...	...	...	1	4	1	1	1	1
...	Diphtheria and croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	Tuberculosis meningitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...
...	Abdominal tuberculosis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Other tuberculous diseases ...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	3	1	...	1	1
4	Meningitis (Non-T.B.) ...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	3	1	2	...	...
2	Convulsions	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
3	Bronchitis	...	...	...	...	...	...	1	2	...	...	...	1	...	...	1	...	...	5	4	...	...	1
45	Pneumonia (all forms) ...	...	3	4	4	3	14	9	3	8	2	5	1	3	...	3	1	...	49	16	11	8	14
2	Influenza	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	3	2	1	...	...
24	Diarrhœa and enteritis ...	...	...	2	1	...	3	8	3	4	2	2	2	1	...	1	...	1	27	13	5	4	5
...	Gastritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	Suffocation, overlaying ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Injury at birth	8	4	1	...	...	13	...	...	...	...	...	...	...	...	...	...	...	13	4	1	4	4
22	Atelectasis	14	9	4	...	2	29	...	...	...	...	...	...	...	...	...	...	...	29	6	7	7	9
29	Congenital malformations ...	4	14	9	2	2	31	6	...	...	2	1	1	...	...	...	...	1	42	7	14	7	14
67	Premature birth	39	31	10	8	2	90	7	...	...	...	...	...	...	...	...	...	...	97	30	14	27	26
1	Atrophy, debility & marasmus	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
18	Other causes	2	3	2	...	3	10	2	1	...	1	...	1	3	...	...	...	1	19	1	8	2	8
1	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
242	Totals	67	66	32	15	12	192	36	10	13	9	9	8	9	1	5	1	4	297	86	64	64	83

Table 9.

MATERNAL MORTALITY. Uncorrected Local Figures.

Cause of Death	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1946 — AGE GROUPS					
											15–	20–	25–	30–	35–	40+
Cæsarian Section	—	—	—	—	—	—	—	—	—	1			1			
Toxæmia of Pregnancy ...	—	—	—	—	—	—	—	—	—	1				1		
Puerperal Sepsis	4	3	4	4	1	3	1	4	1	—						
Septic Abortion	4	—	2	1	—	—	1	—	4	2			1			1
Abortion (non-septic) ...	1	3	—	—	—	—	1	—	1	—						
Ruptured Ectopic Gestation	1	1	—	1	1	—	—	1	—	1					1	
Hydatidiform mole	—	—	—	—	—	—	—	1	—	—						
Puerperal Toxæmia	4	4	4	4	—	—	—	3	2	—						
Eclampsia	4	2	5	3	1	1	5	1	1	4		2		1		1
Dystocia	—	1	1	—	—	—	1	1	1	—						
Retained Placenta	—	—	—	—	—	—	—	2	1	1			1			
Placenta Praevia	1	1	—	2	—	1	2	—	—	—						
Post-Partum hæmorrhage ...	2	2	6	1	—	2	1	1	2	1					1	
Embolism	1	3	—	2	1	1	4	1	1	3			2			1
Ruptured uterus	—	—	—	1	—	1	—	—	—	—						
Obstetric shock	2	3	—	4	1	1	2	—	1	2				1	1	
Acute yellow atrophy ...	—	—	—	—	—	2	2	—	1	1			1			
Chorea	—	—	—	—	—	1	—	—	—	—						
Intestinal obstruction ...	—	—	—	—	—	—	—	—	—	—						
Uræmia	—	—	—	—	—	—	—	—	—	—						
Pulmonary Oedema	—	—	1	—	—	—	—	—	1	1					1	
Total	24	23	23	23	5	13	20	15	17	18	—	2	6	3	4	3
Rate per 1,000 total births ...	3.85	3.65	2.93	2.83	1.33	1.95	2.65	1.74	2.09	2.02						
Deaths in institutions ...	17	17	17	18	5	12	19	13	17	16						
Age Groups—																
15—20 ...	1	—	—	1	—	—	1	—	—	—						
20—25 ...	4	4	4	4	—	4	4	4	2	2						
25—30 ...	7	6	4	10	2	4	3	3	1	6						
30—35 ...	5	4	9	4	2	1	7	6	8	3						
35—40 ...	5	8	4	4	1	3	3	1	4	4						
40+ ...	2	1	2	—	—	1	2	1	2	3						

B.—DEPARTMENT OF PREVENTIVE MEDICINE.

Table 1—**Pathological and Bacteriological Examinations.**

1945		1946
	Swabs.	
	Throat and Nose.	
7,296	K.L.B. Culture	6,467
17	,, Virulence	7
2,303	Hæmolytic Streptococci	2,574
–	Typing	–
834	Other organisms	1,238
	Other Sources.	
19	Laryngeal for T.B.	39
	Sputa.	
11	Malignant Cells	21
3,884	Tuberculosis	5,314
–	Pneumococcal Typing	48
377	Other organisms	774
–	Elastic Fibres	–
–	Vaccine	–
	T.B. Culture	39
	Blood.	
40	Special Hæmatology Investigations	139
1,450	Blood counts	2,161
788	Differential counts	955
2,048	Hæmoglobin counts	2,505
135	Reticulocyte counts	239
13	Platelet counts	19
704	Sedimentation rate	823
14	Bleeding time	10
14	Coagulation time	9
59	Bilirubin investigations	86
18	Sugar tolerance	28
–	Sulphonilamides	–
–	Penicillin	–
843	Urea	805
130	Sugar	232
167	Agglutination	79
2	Uric acid	–
54	Films for malaria	50
14	Paul Bunnell	35
–	Grouping	16
39	Proteins	128
13	Fragility	10
6	Chlorides	6
–	Ascorbic Acid	–
18	Phosphatase	66
1	Calcium	14
17	Cholesterol	38
6	Blood Culture (Enteric)	11
57	,, ,, (Other organisms)	59
–	Van den bergh	–
	Stomach Contents.-	
1,787	Test Meals	2,033
4	Washings for Tubercle	5
10	Vomits	3
	Fæces.	
578	Enteric	697
34	Food poisoning	73
4,045	Dysentery	2,022
38	Tuberculosis	29
270	Other organisms	256
58	Amoebic dysentery	43
166	Occult blood	183
30	Fat	25
11	Bile Pigments	7
20	Parasites	41

Pathological and Bacteriological Examinations—*continued.*

1945		1946
	Urine.	
2,782	Routine	**3,061**
2,197	Culture	**2,123**
63	Enteric	**29**
186	Friedman	**310**
56	Urea concentration	**135**
57	T.B.	**34**
13	Inoculation for T.B.	**5**
–	Amoebic Dysentery	**1**
2	Ascorbic Acid	**3**
–	Hippuric Acid	**2**
5	Chlorides	**13**
19	Water Clearance	**1**
19	Acetone	**25**
55	Sugar	**77**
7	Urobilin	**18**
20	Bile Pigments	**68**
–	Calcium	**–**
1	Sulphonamides	**1**
80	Penicillin	**57**
–	Diastase	**6**
	Pus.	
–	Organisms	**–**
114	Penicillin	**86**
361	Organisms (aerobic)	**360**
25	,, (anaerobic)	**28**
–	T.B.	**–**
	Fluids (for cells, biochemistry and organisms).	
212	Cerebro spinal fluids	**261**
166	Pleural fluids	**299**
66	Seminal fluids	**120**
75	Other fluids	**102**
21	Fluids for penicillin	**3**
–	Pleural fluids for guinea pig inocs. ...	**21**
	Histology.	
316	Human tissues	**332**
10	Animal tissues	**7**
125	*Post Mortems*	**198**
	Waters.	
235	Bacterial counts	**264**
–	Differential counts	**42**
–	Organisms	**1**
	Rats.	
1,597	Plague	**1,568**
–	Other organisms	**–**
–	*Mice*	**–**
	Milks.	
3,170	Bacteriological—	
	Accredited	**134**
	Tuberculin Tested	**341**
	Schools	**228**
	Pasteurised Plants	**54**
	Others	**301**
	Heat treated	**128**
	Chemical—	
	Phosphatase	**711**
	Cream Line	**143**
	Tuberculosis	**1,246**
	Hæmolytic Streptococci	**–**
	Dysentery	**1**
	Enteric	**5**
	Other Organisms	**87**
	Ice Creams	**226**
	Churn rinses	**168**
	Milk Bottle rinses	**315**
	Milk Straws	

Pathological and Bacteriological Examinations—*continued.*

1945		1946
	Venereal Disease.	
11,326	Blood for Wassermann reaction	**15,472**
10,726	Blood for Kahn	**10,287**
730	Complement Fixation Tests for Gonorrhœa	**295**
–	Blood for Quantitative Wassermann reaction	**1,790**
160	C.S. Fluid for Wassermann reaction ...	**271**
103	C.S. Fluid for Cells	**205**
125	C.S. Fluid for Chemical	**214**
107	C.S. Fluid for Lange	**234**
13,290	Films for Gonococci	**14,887**
1	Urine for Gonococci	–
7,822	Cultures for Gonococci	**7,914**
12	Fluid for spirochaetes	**1**
–	Special complement deviation tests ...	–
–	Corvical smears	–
	Preparations.	
4	Tuberculin	**2**
68	Measles Serum	**4**
837	Penicillin	**2,325**
–	Vaccine (Gonococcal)	–
1	,, (Others)	**2**
	Foodstuffs.	
21	Sterility	**67**
24	Organisms	**28**
–	Histology	–
7	*Whooping Cough Plates*	**15**
	Immunisations.	
3	Typhoid	–
6	Typhus	–
2	Tetanus	–
–	Diphtheria	–
–	Others	–
	Distributions.	
86	Diphtheria Prophylactic	–
–	Typhoid vaccines	–
1	Other vaccines	–
–	Tetanus	–
1	Gas Gangrene	–
30	Penicillin	–
	Miscellaneous.	
48	Scrapings for fungi	**21**
	Hair and scales for ringworm	
	Tape worm	
	Rope	
	Tooth	
	Sundries	
	Distilled Water	
	Glucose saline	
	Powder	
	Chaff	
	Penicillin for organism	
	Nurses' masks	

C.—CLINICS.

Table I—Maternity and Child Welfare.

1945		**1946**
	(a) *Notifications*—	
7,943	Live Births (including 571 premature births)	**8,978**
222	Still Births	**269**
67	Confinements at Home—by Doctor	**60**
1,859	by Midwife	**2,214**
7	Premature Births admitted to Hospital (included above)	**120**
6,202	Confinements at Institutions	**6,897**
	(b) *Forms of Maternity Assistance Granted*—	
1,716	Midwives' Fees	**3,005**
–	Consulting Obstetricians	**–**
168	Dentures	**177**
53	Spectacles	**9**
350	(c) *Fees claimed by Medical Practitioners*	**402**
	(d) (i) *Municipal Midwives*—	
1,258	Cases completed as (a) Midwife	**1,690**
232	(b) Maternity Nurse	**300**
18,519	Nursing Visits	**22,795**
16,538	Other Visits	**19,491**
1,689	Attendances at Ante-natal Clinics	**2,236**
	(ii) *Pupil Midwives*—	
885	Cases completed as Midwife	**1,134**
13,690	Nursing Visits	**19,060**
7,328	Other Visits	**8,791**
1,140	Attendances at Ante-natal Clinics	**893**
	(iii) *Medical Students—District Midwifery*—	
289	Cases attended	**289**
	(e) *Attendances at Clinics*—	
	(i) *Municipal Ante-natal* (*Medical Officers Sessions*).	
2,497	Verrier Road	**3,219**
2,712	Bedminster	**3,675**
1,539	Brislington	**2,409**
2,112	Knowle West	**2,516**
3,636	North Bristol	**5,014**
1,297	Portway	**1,534**
3,484	Central	**3,374**
3,170	South Bristol	**3,694**
3,949	Southmead	**4,747**
3,084	Speedwell	**4,109**
959	Clifton	**1,380**
28,439		**35,671**
24.6	Average per session	**26.1**
4,747	New Patients	**6,181**
	(ii) *Municipal Ante-natal* (*Midwives Sessions*)—	
920	Verrier Road	**1,379**
1,412	Bedminster	**2,242**
269	Brislington	**510**
636	Knowle West	**981**
1,338	North Bristol	**2,311**
298	Portway	**403**
313	Central	**583**
798	South Bristol	**1,420**
670	Southmead	**1,375**
457	Speedwell	**747**
111	Clifton	**112**
7,222		**12,063**
13.9	Average per session	**19.5**
94	New Patients	**165**
	(iii) *Post natal Clinics*—	
867	Central	**841**
399	Bedminster	**327**
475	Speedwell	**396**
551	Southmead	**605**
113	Portway	**124**
371	Knowle	**337**
109	Clifton	**613**
513	Bristol South	**331**
3,398		**3,574**
10.8	Average per session	**9.9**
1,430	New Patients	**1,969**

Maternity and Child Welfare—*continued.*

1945		1946
	(iv) *Consultative Ante-natal Clinics*—	
1,206	Central	**1,211**
576	Bedminster	**765**
417	Speedwell	**538**
1,335	Southmead	**1,362**
–	Portway	**273**
404	Knowle	**446**
509	Bristol South	**634**
589	Bristol North	**969**
432	Verrier Road	**580**
5,468		**6,778**
20.1	Average per session	**21.7**
1,424	New Patients	**2,453**
	(v) *Municipal Infant Welfare Centres*—	
	Mothers—	
6,187	Central	**5,580**
7,258	Speedwell	**7,916**
6,243	Southmead	**6,702**
3,302	Portway	**3,620**
6,335	Knowle West	**6,725**
4,524	South Bristol	**5,570**
3,523	Bedminster	**4,350**
2,272	Barton Hill	**2,100**
1,199	Headley Park	**1,047**
1,355	Moorfields	**1,558**
170	Brislington	**1,492**
1,470	Clifton	**2,338**
280	North Bristol	**2,764**
1,037	Brynland Avenue	**2,563**
45,155		**54,325**
27.8	Average attendance per session	**29.2**
	Children under 1 year—	
4,777	Central	**3,929**
5,568	Speedwell	**6,211**
4,756	Southmead	**4,883**
2,127	Portway	**2,261**
4,391	Knowle West	**4,741**
3,987	South Bristol	**4,848**
2,658	Bedminster	**3,410**
1,713	Barton Hill	**1,641**
936	Headley Park	**666**
1,093	Moorfields	**1,244**
120	Brislington	**1,387**
1,305	Clifton	**2,124**
265	North Bristol	**2,661**
1,036	Brynland Avenue	**2,329**
34,732		**42,335**
21.3	Average attendance per session	**22.8**
	Children between 1 and 5 years—	
1,572	Central	**1,735**
1,941	Speedwell	**1,858**
1,816	Southmead	**2,104**
1,571	Portway	**1,784**
2,581	Knowle West	**2,660**
774	South Bristol	**966**
924	Bedminster	**1,165**
656	Barton Hill	**535**
359	Headley Park	**508**
424	Moorfields	**360**
58	Brislington	**168**
275	Clifton	**390**
28	North Bristol	**241**
161	Brynland Avenue	**444**
13,140		**14,918**
8.1	Average attendance per session	**8.0**
	New Patients—	
3,243	Children under 1 year	**4,582**
402	Children between 1 and 5 years	**633**
	(vi) *Voluntary Infant Welfare Centres*—	
22,116	Mothers	**19,728**
35.5	Average attendance per session	**32.3**
14,979	Children under 1 year	**13,540**
24.0	Average attendance per session	**22.2**
9,411	Children between 1 and 5 years	**8,101**
15.1	Average attendance per session	**13.3**
	New Patients—	
1,018	Children under 1 year	**1,076**
183	Children between 1 and 5 years	**173**
	(vii) *Birth Control*	
254	Attendances	**354**

1945		1946
	(viii) *Minor Ailments*—	
2,888	Inspection	2,968
9,919	Treatment	9,234
1,832	New Patients—Inspected	1,868
2,505	Treated	3,016
129	Ante and Post Natal Exercises	66
49	New Patients	18
	(xi) *Sterility Clinic*—	
149	Attendances	289
53	New Patients	85
	Backward Children—	
171	Attendances	185
47	New Patients	19
	Special Diagnostic Clinic—	
1,230	Attendances	1,420
418	New Patients	415
	(f) *Health Visitors*—	
	Visits—	
431	Ante-natal	686
5,954	Primary	7,264
19,457	Under one year	24,107
30,241	1—5 years	41,485
593	Eye cases	1,037
63	Ophthalmia Neonatorum	54
6	Summer Diarrhœa	6
29	Neo-natal deaths	33
8,405	Other special visits	9,059
16,057	Blank visits	18,016
515	Tuberculosis	783
311	Tuberculosis—Blank visits	438
16	Unmarried mothers	4
23	Children and Young Persons Act	77
	Sessions attended—	
8,014	Clinics	8,293
856	Voluntary Infant Welfare Centres	791
2,432	Nursery schools and classes (hours)	2,734
	(g) *Inspector of Midwives and Nursing Homes*—	
	Visits—	
579	1. Midwives Acts	713
170	2. Home Helps	126
178	3. Blank visits	238
45	4. Nursing Homes (Routine)	55
46	5. Nursing Homes (Special)	23
	(h) *C.M.B. Forms*—	
1,172	A. Medical Help	824
7	B. Death	10
28	C. Stillbirth	27
19	D. Laying out the dead	18
29	E. Liability of Infection	26
88	F. Artificial Feeding	58
	(i) *Child Life Protection*—	
261	Visits—Child Life Protection Officer	254
363	Health Visitor	436
76	Children under supervision at beginning	61
42	,, added to register	42
	,, removed from register—	
5	(a) at age limit	6
33	(b) transferred to relatives	30
9	(c) legally adopted	7
–	(d) died	–
10	(e) for other reasons	11
61	Children under supervision at end	49
	Persons registered as receiving children—	
33	(a) Individual foster mothers	27
–	(b) Persons i/c Vol. Homes and Institutions	7
–	(c) Persons i/c Residential Nurseries, etc., for profit, etc.	–
–	Prosecutions under the Act	–
	(j) *Adoption of Children (Regulation) Act,* 1939—	
537	Visits by Adoption Visitor	566
603	,, ,, Health Visitor	598
	Applications received—	
160	(a) Children	98
106	(b) Adopters	159
71	Children placed on trial with prospective adopters	73
85	Adoptions completed	75

Table 2—**Maternity and Child Welfare.—Welfare Department.**

1945		**1946**
No.		**No.**
1,060	Cases on Register at beginning of year	**1,613**
644	,, added	**556**
91	,, removed	**118**
1,613	,, on Register at end of year	**2,051**
	Applications received—	
602	(a) Unmarried mothers	**455**
42	(b) Married women	**101**
	Affiliation Cases completed—	
38	(a) Orders obtained	**40**
87	(b) Agreements arranged	**83**
8	Maintenance Orders (Married Women)	**21**
69	Assisted in application for arrears on Orders	**120**
	Admitted to homes—	
64	(a) Expectant mothers	**59**
76	(b) Mothers with babies	**65**
	Visits—Domiciliary—	
434	(a) Ordinary	**826**
397	(b) After care	**745**
281	Blank visits	**462**
1,118	Interviewed in hospital or homes	**767**
£8,677	Total Receipts	**£11,082**
£8,583	,, Disbursements	**£10,779**

Table 3—**Sunlight Treatment.**

1945				**1946**		
Central Clinic	South-mead (out-patients)	Total		Central Clinic	South-mead (out-patients)	Total
			Artificial Sunlight—			
			New Patients—			
28	44	72	Adults	**38**	**49**	**87**
458	238	696	Schoolchildren	**551**	**148**	**699**
642	123	765	Pre-schoolchildren ...	**728**	**117**	**845**
			Treatments—			
441	588	1,029	Adults	**621**	**432**	**1,053**
4,687	4,358	9,045	Schoolchildren	**5,944**	**3,183**	**9,127**
6,783	2,364	9,147	Pre-schoolchildren ...	**7,590**	**2,448**	**10,038**
			Short Wave (Adults)—			
—	43	43	New Patients	—	**75**	**75**
—	385	385	Treatments	—	**688**	**688**
			Infra-Red (Adults)—			
—	80	80	New Patients	—	**74**	**74**
—	1,351	1,351	Treatments	—	**1,144**	**1,144**
			Massage (Adutls)—			
—	69	69	New Patients	—	**48**	**48**
—	1,037	1,037	Treatments	—	**793**	**793**
			Remedial Exercises (Adults)—			
—	82	82	New Patients	—	**47**	**47**
—	1,555	1,555	Treatments	—	**955**	**955**
			Electrical Treatments (Adults)—			
—	21	21	New Patients	—	**12**	**12**
—	436	436	Treatments	—	**344**	**344**

Table 4—**Eye Clinics.**

1945			**1946**	
New Patients	Attendances		New Patients	Attendances
1,553	6,378	School Children	**1,852**	**7,894**
176	549	Infants	**168**	**692**
58	67	Adults	**40**	**52**
1,787	6,994		**2,060**	**8,638**

Table 5—**Orthopædic Department.**

1945			**1946**	
Patients	Attendances		Patients	Attendances
		Inspections :—		
244	345	M. & C. W.	**269**	**361**
1,021	1,396	School	**1,093**	**1,578**
151	243	Chest	**167**	**270**
1,416	1,984	Totals ...	**1,529**	**2,209**
		Treatment :—		
45	881	M. & C. W.	**45**	**873**
367	5,711	School	**381**	**5,854**
412	6,592	Totals ...	**426**	**6,727**

Table 6—**Foot Clinic.**

1945			**1946**	
Patients	Attendances		Patients	Attendances
18	39	M. & C. W.	**14**	**44**
661	2,776	School	**769**	**3,049**
679	2,815	Totals ...	**783**	**3,093**

Table 7—**Dental Department.**

1945				**1946**		
Schools	Expectant Mothers & Nursing Mothers	Infants	Service.	Schools	Expectant Mothers & Nursing Mothers	Infants
36,535	1,067	698	Inspected	**42,416**	**1,610**	**933**
25,094	1,062	694	Requiring Treatment	**27,082**	**1,572**	**876**
19,817	1,002	707	Treated	**23,077**	**1,314**	**953**
32,853	3,115	1,049	Attendances	**36,480**	**3,814**	**1,542**
			Fillings :—			
13,461	651	—	Permanent Teeth	**15,147**	**1,079**	—
956	—	149	Temporary ,, ...	**1,971**	—	**376**
			Extractions :—			
4,847	3,959	—	Permanent Teeth	**4,522**	**3,617**	—
24,916	—	1,234	Temporary ,, ...	**23,623**	—	**1,429**
12,530	767	587	Anæsthetic Gas	**13,161**	**793**	**702**
			Other operations :—			
4,883	611	—	Permanent Teeth	**6,682**	**966**	—
976	—	187	Temporary ,, ...	**2,429**	—	**439**
			Orthodontic :—			
282	—	—	New patients	**334**	—	—
678	—	—	Total attendances	**1,133**	—	—
303	—	—	Impressions taken ...	**484**	—	—
142	—	—	X-rays	**165**	—	—

Table 8—**Ear, Nose and Throat Department.**

1945			1946	
Patients	Attendances		Patients	Attendances
		Inspections :—		
49	54	M. & C. W.	**73**	**98**
742	1,698	School	**784**	**1,293**
69	145	Chest	**64**	**126**
860	1,897	Totals ...	**921**	**1,517**
		Treatment :—		
9	113	M. & C. W.	**24**	**303**
232	4,919	School	**273**	**5,259**
241	5,032	Totals ...	**297**	**5,562**

Table 9—**X-Ray Department.**

1945				1946		
Film	Screen	Total		Film	Screen	Total
			Central Health Clinic			
5,937	2,845	8,782	Chest	**6,484**	**3,498**	**9,982**
2,721	—	2,721	,, G.P.'s	**4,209**	—	**4,209**
638	—	638	Schools	**822**	—	**822**
456	—	456	M. & C. W.	**582**	—	**582**
982	—	982	Others	**2,420**	—	**2,420**
10,734	2,845	13,579		**14,517**	**3,498**	**18,015**
			Southmead Hospital—			
1,942	164	2,106	Out-Patients	**1,947**	**243**	**2,190**
12,676	3,009	15,685	Totals ...	**16,464**	**3,741**	**20,205**

Table 10—**Scabies Baths.**

	Central Health Clinic		Southmead Hospital		Totals	
	1945	**1946**	1945	**1946**	1945	**1946**
Children	2,544	**2,306**	595	**407**	3,139	**2,713**
Infants	880	**837**	194	**107**	1,074	**944**
Adults						
Females	2,230	**1,982**	382	**205**	2,612	**2,187**
Males	984	**1,355**	—	—	984	**1,355**
Total Attendances ...	6,638	**6,480**	1,171	**719**	7,809	**7,199**
† *New Patients*—						
Children	1,271	**1,142**	249	**170**	1,520	**1,312**
Infants	473	**417**	82	**43**	555	**460**
Adults						
Females	1,181	**1,009**	163	**94**	1,344	**1,103**
Males	537	**747**	—	—	537	**747**
Total New Patients ...	3,462	**3,315**	494	**307**	3,956	**3,622**

† Included in "Total Attendances."

In addition to the above 175 patients involving 323 attendances were dealt with for adjacent authorities.

Table 11—**Dispensary.**

		1946
(1) Establishments served—		
Central Health Clinic		
Health Centres and Clinics (24)		
Hospitals and Institutions (12)		
Day Nurseries, Special Nursery Schools and Classes (66)		
Municipal Midwives (69)		
Social Welfare District Medical Officer		
(2) Turnover of Drugs, Dressings, etc.—		
Quantity of mixtures made	gallons	1,080
,, ointment made	lbs.	584
Vit. A. & D. Emulsion	gallons	183
Vit. A. & D. Capsules	caps.	131,250
Whooping Cough Vaccine	cc	1,440
A.P.T. Diph. Proph. (5 cc vials)	cc	12,435
Other Medicines dispensed	gallons	267
Lint and Cotton Wool	lbs.	2,390
Insulin supplied	cc	26,350
Anahæmin supplied	1 cc ampoules ...	842
(3) Bulk purchase of Drugs—		
	lbs.	3,456
	gallons	319
	tabs.	563,000

Table 12—**Immunisations, Vaccinations, etc.**

1945			1946	
		(i) *Diphtheria*—Number of immunisations completed at Schools, Clinics and Nurseries, General Practitioners during the year.		
5,183		Full course—Ages 0—5 years	4,941	
1,867		Ages 5—15 years	2,899	
5,177		Booster dose —15 years	6,592	
No. of persons inoc.	No. of injects.	(ii)	No. of persons inoc.	No. of injects.
45		Cholera	181	8
	69	Typhus		306
	47	Typhoid		238
	14	Tetanus		83
	7	Other injections		20
45	137	Totals	181	655
2,894		(iii) *Vaccination*— The number of primary and re-vaccination certificates received during the year	2,586	

Table 13—**Chest Clinic.**

1945		1946
1,854	New Patients—adults	**1,863**
830	children	**730**
7,482	Re-examination—adults	**8,942**
1,336	children	**1,490**
10,324	Total attendances (including above)—adults	**11,938**
3,006	children	**2,867**
	Home Visits—	
422	Doctors	**469**
1,581	Nurses	**1,354**
334	Injections—Tuberculin	**313**
185	Other	**233**
2,350	Artificial pneumothorax refills	**3,086**
969	Ultra-violet light cases	**1,001**
239	Orthopædic Surgeon	**270**
145	E.N.T. Surgeon	**126**
11,503	X-rays	**14,191**
2,143	Sputum examinations	**1,723**
14	Personal consultations—at home	**21**
53	Other	**46**
	Admissions to Institutions:—	
654	Adults	**648**
213	Children	**216**
	Cases on Register at end of year—	
3,533	Pulmonary	**3,702**
1,120	Non-Pulmonary	**1,138**

Table 14—**Tuberculosis Welfare Department.**

1945		1946
	Allowances in cash.	
	Total applications granted:—	
227	(*a*) Maintenance	**253**
29	(*b*) Discretionary (also included in (*a*))	**45**
35	(*c*) Special Payments	**35**
36	(*d*) Social Welfare	**31**
249	Patients in receipt of allowances at end of year	**296**
	Allowances in kind.	
107	Free Milk grants—new cases	**182**
288	,, ,, ,, —renewals	**341**
123	Total patients in receipt of milk at end of year	**185**
	Voluntary Care Committee.	
105	Allowances—in kind	**161**
25	in cash	**43**
	Rehabilitation.	
77	Patients referred to Ministry of Labour for suitable employment	**40**
7	Patients introduced to Training Centre	**5**
	Successfully introduced to employment:—	
2	(*a*) Part-time	**3**
39	(*b*) Full-time	**21**

Table 15—**Mass Radiography.**

1945				1946		
Males	Females	Total		Males	Females	Total
			Miniature X-ray—			
15,486	14,505	29,991	Number of films made	**17,425**	**14,150**	**31,575**
100	100	200	,, ,, ,, cancelled	**216**	**92**	**308**
			Large films—			
863	557	1,420	New cases	**1,193**	**588**	**1,781**
89	113	202	Repeat	**150**	**152**	**302**
58	52	110	Other	**3**	**1**	**4**
			Clinical examinations—			
208	142	350	First examinations	**231**	**115**	**346**
77	101	178	Re-examinations	**124**	**126**	**250**

Table 16—**Venereal Diseases.**

1945					1946			
Guardian House	Avonmouth	Southmead	Snowdon Road	Clinics	Guardian House	Avonmouth	Southmead	Snowdon Road
1,615	444	276		*New Patients*	**2,379**	**513**	**222**	
178	21	41		Syphilis	**265**	**19**	**42**	
17	—	9		,, (congenital included above)	**11**	**1**	**6**	
14	26	—		Soft Chancre	**11**	**26**	**1**	
352	136	42		Gonorrhœa	**556**	**177**	**21**	
1,071	261	193		Non-Venereal	**1,547**	**291**	**158**	
2,771	622	479		*Total Patients*	**3,814**	**703**	**391**	
15,566	3,408	2,463		*Total Attendances*	**23,991**	**4,140**	**1,989**	
14,585	2,209	2,443		Individual attention by Medical Officer ...	**23,227**	**2,884**	**1,954**	
981	1,199	20		Investigation, Dressings, etc.	**764**	**1,256**	**35**	
896	48	133		*Under treatment end of year*	**1,258**	**74**	**114**	
510	13	82		Syphilis	**710**	**11**	**89**	
5	3	—		Soft Chancre	**6**	**4**	**—**	
247	18	18		Gonorrhœa	**357**	**40**	**12**	
134	14	33		Non-Venereal	**185**	**19**	**13**	
—	—	285	166	*In-patients*	—	—	**212**	**160**
—	—	7,176	3,800	*In-patient days*	—	—	**4,765**	**5,034**

Table 17—**Incidence of Venereal Diseases, 1938—1946.**

BRISTOL.

	1938.		1939.		1940.		1941.		1942.		1943.		1944.		1945		**1946**	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total Syphilis ...	94	76	74	74	85	30	144	61	225	73	238	117	152	137	120	140	**186**	**140**
Early Syphilis (included in total)	53	10	43	13	42	8	114	23	182	43	199	73	126	97	89	78	**139**	**93**
Gonorrhœa ...	415	107	377	125	331	98	398	124	440	157	526	186	317	235	354	176	**600**	**154**
Chancroid ...	5	—	5	—	8	—	2	—	38	—	7	—	31	—	35	5	**30**	**8**

Table 18—**V.D. Welfare Department.**

1945			1946	
M.	F.		M.	F.
756	930	Number of cases on Welfare Officer's Register ...	**1,009**	**572**
1,672	936	Number of new cases added during year	**2,863**	**873**
208	200	Attendances at Clinics	**221**	**230**
		Interviewed in Clinics—		
288	223	(*a*) Primary cases	**323**	**264**
285	547	(*b*) Current cases	**491**	**797**
211	170	(*c*) Hospital In-patients	**195**	**187**
		Visiting—		
164	126	(*a*) Primary cases—First visit	**287**	**173**
30	9	Second visit	**27**	**9**
14	1	Repeat visit	**4**	**1**
133	112	Examined	**247**	**157**
407	472	(*b*) Defaulters— First visit	**603**	**447**
74	39	Second visit	**33**	**42**
16	3	Repeat visit	**14**	**5**
295	324	Return for treatment	**494**	**281**
117	96	Number of visits for other specified purposes	**109**	**117**
821	752	Total number of visits for all purposes	**1,077**	**784**
73	73	Number of consultations with Voluntary bodies ...	**72**	**98**
		Regulation 33B. (included in above figures)—		
8	128	1—(*a*) Total number for whom Form 1 was received	**32**	**79**
74	36	(*b*) Form 1 sent to M.O.H. of other districts ...	**42**	**54**
		2— Number in (1) persuaded to be examined before-named on second Form 1—		
7	64	(*a*) Contacts found	**29**	**56**
7	60	(*b*) Contacts examined	**29**	**51**
—	26	3— Number in (1) for whom two or more Forms 1 were received	**2**	**19**
		4— Number of those in (3) who were:—		
—	21	(*a*) found	**2**	**14**
—	15	(*b*) examined after persuasion	**2**	**7**
—	10	(*c*) served with Form 2	**1**	**7**
—	10	(*d*) examined after service of Form 2 ...	**1**	**7**
—	5	(*e*) prosecuted	**—**	**—**
		Rehabilitation—		
25	24	(*a*) Successfully introduced to employment	**53**	**41**
19	10	(*b*) Successfully introduced to club or other suitable organisation	**15**	**17**

D.—HOSPITALS, INSTITUTIONS AND NURSERIES.

Table 1—**Hospitals.**

No. of Beds occupied 31.12.45		Beds Provided	No. Admitted	Births (Live)	No. Discharged	No. of deaths	No. of Beds occupied 31.12.46	Patient Days	Waiting List
	Southmead—								
291	General	**322**	**3,235**	—	**2,756**	**501**	**269**	**122,488**	**100**
52	T.B.	**66**	**191**	—	**164**	**36**	**43**		
14	V.D.	**45**	**170**	—	**176**	—	**8**	**5,369**	—
149	Maternity ...	**153**	**3,575**	**2,896**	**3,562**	**14**	**148**	**55,736**	—
46	**Mortimer House ...**	**35**	**812**	**686**	**1,490**	**8**	**24** **Babies22**	**10,037**	—
	Snowdon Road—								
229	General	**234**	**288**	—	**120**	**167**	**230**	**84,833**	—
22	T.B.	**25**	**59**	—	**39**	**17**	**25**	**8,566**	—
9	V.D.	**24**	**154**	—	**147**	**3**	**13**	**5,105**	—
	Ham Green—								
177	T.B.	**184**	**271**	—	**230**	**44**	**174**	**65,703**	**56**
156	Fevers, etc. ...	**314**	**1,710**	—	**1,697**	**66**	**103**	**41,390**	—
	Charterhouse—								
35	T.B.	**49**	**78**	—	**78**	—	**35**	**14,145**	—
1	Fevers, etc. ...	**55**	—	—	**1**	—	—	**2**	—
	Frenchay Hospital—								
30	General	**18**	**10**	—	**18**	**4**	**18**	**9,236**	—
—	Thoracic, T.B. ...	**18**	**58**	—	**46**	—	**12**	**2,770**	**32**
—	,, Non-T.B.	**55**	**307**	—	**251**	**12**	**44**	**12,643**	**64**
34	Nursery	**40**	**49**	—	**43**	—	**40**	**12,879**	—
71	**Frenchay San. ...**	**100**	**236**	—	**228**	**7**	**72**	**28,154**	**2**
36	**Winsley San. ...**	**58**	**28**	—	**39**	**3**	**22**	**12,244**	**3**
15	**Other T.B. Insts. ...**	**5**	**17**	—	**25**	**2**	**5**	**2,361**	—

Table 2—**Cancer Scheme under the Cancer Act, 1939.**

1945				**1946**		
Treated free	Treated at part cost	Total	*A. In-Patients.*	Treated free	Treated at part cost	Total
			Bristol Royal Hospital—			
88	177	265	Infirmary Branch	**82**	**184**	**266**
50	157	207	General Hospital	**54**	**130**	**184**
2	13	15	Royal W. of E. Sanatorium ...	—	—	—
7	2	9	Kewstoke E.M.S. Hospital ...	—	—	—
22	92	114	Southmead Hospital	**32**	**118**	**150**
1	9	10	Snowdon Road Hospital ...	**2**	**20**	**22**
—	—	—	Frenchay Hospital	**6**	**20**	**26**
170	450	620	Totals ...	**176**	**472**	**648**
Total No. of patients	Total No. of attendances		*B. Out-Patients.*	Total No. of patients	Total No. of attendances	
			Bristol Royal Hospital—			
—	—		Infirmary Branch	**203**	**335**	
533	4,131		General Hospital	**951**	**8,192**	
533	4,131		Totals ...	**1,154**	**8,527**	

Table 4—**Nurseries.**

No. on Register 31.12.45		No.	Places Provided 31.12.46	No. added to Register	No. Removed from Register	No. of Deaths	No. on Register 31.12.46	Waiting List
189	(i) Residential ...	(5)	**183**	**373**	**383**	—	**179**	**33**
876	(ii) Day	(13)	***520**	**694**	**665**	—	**560**	**175**

*4 Nurseries closed (155 places).

5 Nurseries transferred to Education Dept. as Nursery Schools (230 places).

Table 5—**Home Helps.**

1945		1946
	Total cases helped—	
134	(a) Maternity	**200**
237	(b) Sickness	**260**
	Total days helped—	
1,556	(a) Maternity	**2,496**
2,913	(b) Sickness	**3,588**

E.—SANITATION, HOUSING, SHOPS ACTS, ETC.

Table 1—**Sanitary Inspectors.**

1945				1946		
Visits	Re-visits	Total		Visits	Re-visits	Total
—	—	6,111	Complaints received	—	—	**6,627**
—	—	355	Recommendations for Housing accommodation	—	—	**710**
			Visits—			
6.377	18,890	25,267	Dwelling houses (P.H.)	**5,646**	**23,029**	**28,675**
3	2	5	Houses let in lodgings	**4**	**6**	**10**
8	14	22	Common lodging houses	**6**	**5**	**11**
69	96	165	Foodshops—Registerable	**35**	**70**	**105**
239	323	562	Not registerable	**318**	**920**	**1,238**
62	102	164	Other shops	**141**	**345**	**486**
59	92	151	Bakehouses	**44**	**129**	**173**
37	64	101	Workplaces and Offices	**49**	**89**	**138**
120	133	253	Factories—Non-mechanical	**46**	**183**	**229**
158	271	429	Mechanical	**111**	**486**	**597**
—	—	—	Outworkers	**1**	**—**	**1**
21	38	59	B.C. Act, 1926, Section 62	**27**	**40**	**67**
3	4	7	Smoke observations	**14**	**37**	**41**
7	20	27	Offensive trades	**16**	**6**	**22**
15	35	50	Entertainment places	**22**	**71**	**93**
12	56	68	Tents, Vans and Sheds	**38**	**168**	**206**
32	56	88	Keeping of animals	**25**	**47**	**72**
587	98	685	Food inspection	**338**	**147**	**485**
690	498	1,188	All other matters	**913**	**1,066**	**1,979**
			Infectious diseases			**2,752**

In-tima-tion	Statu-tory	Compliance			In-tima-tion	Statu-tory	Compliance	
		I.	S.				I.	S.
				Notices—				
1,578	1,694	785	798	Dwelling houses (P.H.)	**1,917**	**2,023**	**1,188**	**1,329**
1	—	—	—	Houses let in lodgings	**3**	**—**	**—**	**—**
1	—	—	—	Common lodging houses	**—**	**—**	**1**	**—**
4	—	4	—	Foodshops—Registerable	**5**	**—**	**—**	**—**
38	—	12	1	Not registerable	**63**	**—**	**69**	**—**
14	—	8	—	Other shops	**37**	**—**	**15**	**1**
6	—	—	—	Bakehouses	**6**	**—**	**11**	**1**
7	—	2		Workplaces and Offices	**7**	**—**	**5**	**—**
49	—	13	—	Factories—Non-mechanical	**19**	**—**	**36**	**—**
67	—	24		Mechanical	**21**	**—**	**36**	**—**
—	—	—	—	Outworkers	**—**	**—**	**—**	**—**
—	—	—	—	B.C. Act, 1926, Section 62	**—**	**1**	**—**	**1**
—	—	—	—	Smoke observations	**—**	**—**	**1**	**—**
—	—	—	—	Offensive trades	**1**	**—**	**—**	**—**
3	—	1	—	Entertainment places	**2**	**—**	**3**	**—**
—	—	—	—	Tents, Vans and Sheds	**—**	**—**	**—**	**—**
2	—	1	—	Keeping of animals	**2**	**—**	**1**	**—**
2	—	—	—	Food inspection	**—**	**—**	**—**	**—**
9	—	4	—	All other matters	**19**	**—**	**15**	**2**

Table 2—**Remedial Action.**

1945		**1946**
	Drainage Works—	
44	New drains laid	**144**
354	Drains repaired	**439**
688	Choked drains cleared	**587**
44	Tests made	**130**
	Sanitary Conveniences—	
65	Flushing appliances introduced	**160**
12	Additional closets fitted	**24**
6	Separate closets for sex provided	**16**
167	New pans fitted	**220**
3	Action re bathroom and geyser vent	**1**
2	Urinals fitted	**41**
233	Other works	**363**
23	Intervening vent space provided	**60**
	Water Supplies—	
10	New and additional installation	**48**
1	Hot water installed	**3**
—	Wells closed	**—**
	Other Sanitary Fittings—	
43	New sinks fitted	**117**
1	Additional sinks provided	**5**
4	Wash basins provided	**26**
	Other Works—	
963	Roofs repaired	**1,196**
431	Dampness remedied	**717**
2,519	Other new and repair works	**2,842**
6	Yards paved and drained	**50**
146	Houses cleansed—Dirty	**220**
280	Verminous	**159**
—	Food store installed—cooking facilities improved	**5**
10	Lighting improved	**31**
11	Ventilation improved	**37**
—	Meal rooms, provided	**4**
7	Heating provided	**13**
1	Exhumations	**—**
	Keeping of Animals—	
—	Provision of manure receptacles	**1**
—	Drainage provided	**2**
4	Removal of manure	**2**
	Aged and Infirm Persons—	
7	Removals—Voluntary	**11**
—	Court order	**1**
	Smoke Observations—	
5	Infringements—Found	**3**
5	Remedied	**3**
	Noise—	
3	Nuisances—Found	**6**
3	Abated	**6**
	Other Nuisances—	
557	Found	**477**
557	Abated	**477**

Table 3—**Housing Acts.**

1945		1946
	Inspections—	
—	Section 9	—
91	,, 11 and 12	39
—	Clearance area	—
	Represented to Committee—	
—	Section 9	—
91	,, 11 and 12	39
—	Clearance area	—
	Orders Made—	
53	Section 11 (demolition)	26
8	,, 12 (closing orders)	11
3	,, 11 (undertakings to repair accepted)	21
5	,, 11 (undertakings not to use accepted)	2
	Houses Repaired—	
—	Section 9—Informal	1
2	,, 9—Formal	2
—	,, 9—Formal by Corporation in default	—
1	Undertakings to repair	6
1	Undertakings not to use cancelled after repair	2
2	Other repairs	1

Table 4—**Dairies, Milkshops, etc.**

1945	REGISTRATIONS.	1946
972	Personal	931
	Milk :—	
180	Dairies	123
139	Dairies outside City retailing within	144
601	Milkshops	611
52	Cowsheds	53
	Ice-cream :—	
220	Manufacture, storage, etc.	262
	Licences :—	
	Tuberculin Tested—	
2	To produce	2
—	To produce and bottle	—
7	To bottle and sell	8
10	To sell only	17
4	Supplementary	6
	Accredited—	
9	To produce	10
1	To produce and bottle	1
1	To bottle	1
1	To sell only	1
3	Supplementary	3
	Pasteurised—	
11	To produce and sell	8
55	To sell only	54
3	Supplementary	3

Dairies, Milkshops, etc. (contd.).

1945		SAMPLES.	1946	
Samples taken	Samples not complying		Samples taken	Samples not complying
195	30	Pasteurisation Test (Schools)	234	27
		Tubercule Examination (including repeats)—		
99	—	City	70	—
721	—	Somerset	583	—
422	—	Gloucestershire	540	—
10	—	Other counties	20	—
3	1	Tuberculin Tested (certified)	5	—
167	71	Tuberculin Tested	159	27
32	9	Pasteurised	23	3
116	49	Accredited	134	29
181	16	Heat-treated	179	6
231	24	Institution Tests	307	20
1,588	—	Under Food and Drugs Act	1,528	—
25	12	Ice-cream	211	129
280	30	Waters	251	33
211	48	Others	334	88
2,819	—	Fæces	1,468	—
83	5	Plant tests	58	—
147	43	Churn or bottle rinses	500	166
—	—	Blood tests	—	—

1945	VISITS AND NOTICES.	1946
	Visits—	
1,280	Dairies	1,322
181	Milkshops	164
407	Cowsheds and Farms	287
235	Corporation Institutions	243
198	Schools	226
3,970	Others	3,355
297	Ice-cream premises	541
	Notices—	
61	Verbal	23
9	Verbal compliance	13
15	Written	19
15	Written compliance	14
	Remedial Action—	
	Premises—	
—	New built	1
8	Altered or repaired	5
6	Roofs repaired	3
21	Cleansed—Dairies	24
7	Other defects	8
—	Plants installed—sterilising	3
5	New or additional water supply installed	1
	Drainage—	
—	Tests made	—
—	New drains	1
—	Repairs	1
1	Chokages cleared	—
	Water Closets—	
1	Flushing appliances	1
4	New pans	2
1	Other repairs and cleansing	3
—	Cesspools abolished	—
—	Cesspools provided	—
4	Other nuisances abated	7

Table 5—**Inspection of Meat and other Foods.**

1945		1946
	Visits—	
1,660	Meat Markets	**914**
2,143	Shops	**2,377**
1	Cattle Markets and Railway Sidings	**2**
—	Fish curing premises	**—**
65	Sausage making premises	**46**
—	Cold Stores	**—**
30	Connection with food poisoning	**37**
—	Street traders	**—**
126	Institutions	**83**
1,533	Slaughterhouses	**1,637**
	Remedial Action—	
—	Slaughterhouses cleansed	**—**
—	Slaughterhouses rebuilt, repaired or altered	**—**
—	Sanitary defects, etc.	**—**

1945			1946	
City	Abattoir		City	Abattoir
		Animals examined		
8,404	11,107	Beasts	**9,622**	**11,810**
5,804	9,739	Calves	**2,615**	**6,145**
36,645	42,617	Sheep	**44,609**	**50,477**
858	1,525	Pigs	**898**	**800**
10,166	—	Pigs (New Zealand and American) ...	**14,765**	**—**
22,026	26	,, Bacon	**15,844**	**—**
—	29	Goats	**—**	**18**
		Carcases destroyed —		
310	333	Beasts	**234**	**416**
30	24	Calves	**15**	**11**
134	22	Sheep	**74**	**54**
65	15	Pigs	**27**	**8**
—	1	Goats	**—**	**—**

1945		1946
Tons		Tons
	Meat destroyed from—	
159	Slaughterhouses and shops	**146**
—	Cold Stores	**—**
148	Abattoir	**177**
256	Fish, Poultry, Vegetables, etc.	**130**

Table 6—**Disinfections, Drain Tests, etc.**

1945		1946
5,837	Premises disinfected	**5,225**
86,259	Articles disinfected	**82,632**
823	Articles destroyed	**1,940**
690	Vermin repression—by spraying	**548**
16	by fumigation	**9**
152	Vermin baths—Men	**130**
15	Women	**6**
448	Foodstuffs, etc., destroyed	**470**
229	Drain tests	**165**
101	Other work	**349**

Table 7—**Rat Repression.**

1945					1946			
Business Houses	Houses	Other	Total		Business Houses	Houses	Other	Total
10	11	5	26	Complaints incompletely dealt with b/forwd. ...	**9**	**11**	**6**	**26**
456	798	180	1,434	Complaints received ...	**434**	**822**	**188**	**1,444**
466	809	185	1,460		**443**	**833**	**194**	**1,470**
				Remedial action—				
				Infestation cleared—				
389	478	146	1,013	By Corporation ...	**345**	**532**	**160**	**1,037**
5	30	1	36	By occupiers	**26**	**71**	**2**	**99**
63	290	32	385	No action required	**68**	**228**	**31**	**327**
9	11	6	26	Incompletion at end of year carried forward	**4**	**2**	**1**	**7**
466	809	185	1,460		**443**	**833**	**194**	**1,470**
			49	Places subject to routine visits	**122**	**—**	**501**	**623**
			581	No. of visits	**132**	**—**	**542**	**674**
				Notices served—				
456	798	180	1,434	Informal	**434**	**822**	**188**	**1,444**
—	—	—	—	Statutory (formal) ...	**—**	**—**	**—**	**—**
—	—	—	—	Statutory notices compliance	**—**	**—**	**—**	**—**
Avonmouth	Bristol	Portishead	Total		Avonmouth	Bristol	Portishead	Total
				Rats recovered—				
				Docks, quays, wharves, etc.—				
3,311	10	34	3,355	Brown	**2,199**	**122**	**5**	**2,326**
46	240	—	286	Black	**189**	**118**	**4**	**311**
—	—	—	—	Species not recorded ...	**—**	**—**	**—**	**—**
938	127	2	1,067	Examined for plague ...	**718**	**110**	**—**	**828**
615	46	40	701	Mice	**584**	**45**	**74**	**703**
Total				City—				
5,037				Brown				**2,553**
970				Black				**672**
—				Species not recorded ...				**—**
144				Examined for plague ...				**144**
1,801				Mice				**1,915**

Table 8—**Shops Acts and Young Persons.**

1945		**1946**
	Visits—	
2,408	Retail	**6,268**
35	Wholesale	**191**
	Re-visits—	
666	Retail	**2,492**
85	Wholesale	**58**
	Infringements—	
329	Failure to exhibit notices	**1,476**
13	Half holiday and statutory holiday	**95**
9	Hours of young persons	**46**
11	Meal intervals	**53**
6	Seats for female assistants	**18**
	Assistants' Facilities Improved—	
14	Sanitary	**46**
3	Heating	**6**
—	Ventilation	**—**
—	Facilities for meals	**7**
1	Lighting	**4**
2	Washing	**14**
54	Referred to C.S.I. (Section 10)	**116**
85	Verbal warnings	**268**
4	Warning letters	**22**
2	Legal proceedings	**5**
—	Visits to cinemas	**—**
	Shops Acts and Sunday Entertainment—	
38	Visits	**71**
2	Re-visits	**2**
3	Infringements—Holidays	**3**
6	Records	**6**
	Young Persons (Employment) Act, 1938—	
103	Visits	**126**
38	Re-visits	**19**
25	Infringements	**12**
8	Verbal warnings	**9**

F.—BRISTOL PORT HEALTH AUTHORITY. 1946.

Table 1—**Amount of Shipping entering the Port during the year 1946.**

(Avonmouth, Portishead and Bristol.)

	Number *	Tonnage *	Number inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of vessels on which defects were found and reported to Ministry of Transport Surveyors	Number of vessels reported as having, or having had during the voyage, infectious disease on board
			By the Medical Officer of Health	By the Sanitary Inspector				
Foreign—								
Steamers	575	1,864,526	427	427	178	166	3	12
†Motor			138	138	41	41	1	4
Sailing	—	—	—	—	—	—	—	—
Fishing	—	—	—	—	—	—	—	—
Total Foreign	575	1,864,526	565	565	219	207	4	16
Coastwise—								
Steamers	8,228	1,066,693	—	433	64	58	1	4
†Motor			—	228	4	4	—	—
Sailing			—	—	—	—	—	—
Fishing			—	—	—	—	—	—
Total Coastwise	8,228	1,066,693	—	661	68	62	1	4
Total Foreign and Coastwise	8,803	2,931,219	565	1,226	287	269	5	20**

†Includes mechanically propelled vessels other than steamers.

*Figures supplied by Port Authority. The foreign tonnage includes vessels entering from a coastwise port to load for a foreign port.

**Excluding vessels having venereal disease on board.

CHARACTER OF TRADE OF PORT.

Table 2—**Passenger Traffic during the year—1946**.

No. of Passengers	1st Class	2nd Class, 3rd Class, Transmigrants	Totals
Inwards—			
Aliens	150	—	150
British	1,426	—	1,426
Outwards—			
Aliens	104	—	104
British	1,189	—	1,189

The foreign ports from which passengers principally arrived were :—Kingston (Jamaica), Basra (Irâq), Montreal and Halifax (Canada), Norfolk and New York (U.S.A.), Buenos Aires (Argentine), Auckland (N.Z.), Melbourne (Australia), also North and West African Ports.

MEDICAL INSPECTION OF ALIENS.

Table 3—**Annual Return by the Medical Inspector of Aliens for the year ended 31st Dec., 1946.**

	Total	Number inspected by the Medical Inspector	Number subjected to detailed examination by the Medical Inspector	Certificates Issued					Transmigrants
				Lunatic, Idiot, or M.D.	Undesirable for medical reasons	Physically incapacitated	Suffering from acute infectious disease	Landing necessary for adequate medical examination	
(a) Total number of Aliens landing at the Port ...	150	150	30	—	—	—	1	1	—
(b) Aliens refused permission to land by Immigration Officer	16	16	—	—	—	—	—	—	—
(c) Transmigrants	—	—	—	—	—	—	—	—	—
Total Aliens arriving at the Port	166	166	30	—	—	—	1	1	—

Total number of vessels carrying Alien passengers 57
Number of vessels dealt with by the Medical Inspector 57

Table 4—Cases of Infectious Sickness landed* from vessels.

Disease	No. of Cases during 1946		No. of vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Infectious Diseases, including—				
Pneumonia	1	—	1	4.2
Diphtheria	—	1	1	0.8
Influenza	—	13	10	3.6
Malaria	—	5	4	12.4
Venereal Disease	—	559	254	298.4

Other diseases not included in Table 4 above landed* from vessels.

Disease	No. of Cases during 1946		No. of vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Rheumatism	—	2	2	3.2
Diseases of—				
Nervous system	—	7	7	16.8
Digestive system	1	35	31	28.4
Circulatory system	—	5	5	6.2
Respiratory system	1	8	8	8.0
Skin and Cellular Tissue	—	49	34	21.2
Genito urinary system	—	4	4	3.6
Bones and organs locomotion	—	4	3	7.2
Traumatism	—	46	38	23.6
Ill-defined	—	9	8	9.0

* Includes only cases requiring medical attention, but all were not removed from ships to hospital.

Table 5—Cases of Infectious Sickness on vessels during voyage but disposed of prior to arrival.

Disease	No. of Cases during 1946		No. of vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Infectious Diseases, including—				
Malaria	2	8	3	5.6
Measles	2	—	1	3.6
Venereal Disease	—	6	4	2.8

Other diseases not included in above table ON VESSELS DURING VOYAGE but disposed of prior to arrival.

Disease	No. of Cases during 1946		No. of vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Diseases of—				
Skin and cellular tissue	—	3	3	0.2
Digestive system	—	1	1	1.4
Traumatism	—	1	1	1.0
Ill-defined diseases	—	2	2	2.0

Table 6—**Measures of Rat Repression. On vessels. 1946.**

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	43	10	232	125	67	45	18	91	57	127	10	296	1,121
Brown	—	—	—	—	—	—	—	—	—	—	—	—	—
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined	41	6	125	55	54	35	12	66	44	34	10	105	587
Infected with plague	—	—	—	—	—	—	—	—	—	—	—	—	—
Mice	—	—	54	—	—	—	21	—	—	—	—	—	75

Table 7—**Rats destroyed on Quays, Docks, Wharves and Warehouses.**

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	17	15	25	4	16	22	41	29	34	33	41	34	311
Brown	145	141	261	245	220	258	241	141	206	197	168	103	2,326
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined	30	75	84	37	77	75	117	30	83	89	91	40	828
Infected with plague	—	—	—	—	—	—	—	—	—	—	—	—	—
Mice	54	7	56	67	74	66	79	48	75	77	58	42	703

Table 8—Measures of rat destruction on plague "infected" or "suspected" vessels from plague infected ports arriving at the Port during 1946.

Total No. of such vessels arriving	No. of such vessels fumigated with SO2	No. of rats killed	No. of such vessels fumigated with H.C.N.	No. of rats killed	No. of such vessels on which trapping, poisoning, etc. were employed	No. of rats killed	No. of such vessels on which measures of rat destruction were not carried out
44**	—	—	—	—	20	184	24*

*These ships were all examined for rat indications but no measures were taken, either because there was no evidence of rats, or because of very short stay in port.

**Forward Notices with regard to four ships were sent to other U.K. ports where vessels proceeded to complete discharge of cargo. Fumigations were subsequently arranged at these ports.

Table 9—Deratisation certificates and Deratisation exemption certificates issued during 1946.

Net Tonnage	No. of ships	No. of deratisation certificates issued after fumigation—					Deratisation exemption certificates issued	TOTAL certificates issued
		With H.C.N.	With Sulphur	With H.C.N. and Sulphur	After trapping, poisoning, etc.	TOTAL		
Ships up to 300 tons ...	2	—	—	—	—	—	2	2
,, from 301/1,000 tons	20	1	—	—	—	1	19	20
,, ,, 1,001/3,000 ,,	19	2	—	—	—	2	17	19
,, .. 3,001/10,000 ..	66	11	1	—	—	12	54	66
,, over 10,000 tons ...	—	—	—	—	—	—	—	—
Totals ...	107	14	1	—	—	15	92	107

Table 10—Hygiene of Crew's Spaces—Classification of Nuisances.

Nationality of Vessel	No. of vessels inspected	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	974	46	163	713
Other nations	252	11	7	55
Totals ...	1.226	57	170	768

Table 11—**Meats (Condemned).**

Description	Decomposition and Mould				Brine Stain				Contamination and Taint				Totals			
	T.	C.	Q.	lbs.	T.	C.	Q.	lbs.	T.	C.	Q.	lbs.	T.	C.	Q.	lbs.
Beef	2	6	1	2		3	2	7				16	2	9	3	25
Mutton & Lamb ...	9	6	2	4		14	0	23	6	8	3	5	16	9	2	4
Pork	7	1	1	18		1	3	16					7	3	1	6
Veal																
Offal			1	6				13							1	19
Bacon & Ham ...										4	1	10		4	1	10
Prepared Meats ...																
Skinned Rabbits ...										2	1	2		2	1	12
Totals ...	18	14	2	2		19	3	3	6	15	2	15	26	9	3	20

Table 12—**Canned Foods (Condemned).**

No. of Tins	Description	Why Condemned	T.	C.	Q.	lbs.
	Canned Meats:—					
500	Beef, corned	Blown, burst, crushed		17	1	7½
137	Mutton, corned ...	and pierced.		2	1	19
1	Ox Tongue	do.				6
47	Pork Sausages ...	do.			1	19
33	Pork Sausage Meat ...	do.			1	5
8,368	Evaporated Milk ...	do.	3	7	3	27
	Canned Fish:—					
113	Mackerel	Crushed and burst.		1	0	1
112	Pilchards	do.		1	0	0
346	Salmon	do.		1	2	5½
	Canned Fruit:—					
3	Apples	do.				18
61	Apricots	do.		1	2	1
33	Fruit Salad	do.			1	5
706	Peaches	do.		12	3	18
295	Pears	do.		4	3	21
306	Canned Tomatoes, Juice, Puree, etc.	do.		5	2	8
297	Lime Juice	do.		3	2	16
8	Puddings	do.				8
11,366	Totals		6	1	0	17

Table 13—**Miscellaneous Foods (Condemned).**

Description	Why Condemned	Weight T.	C.	Q.	lbs.
Fresh Fruit:—					
Apples	Decomposed and gross contamination		4	1	14
Oranges, Seville ...	do.	4	0	0	17
Dried Fruit:—					
Apricots	Fermentation, mould and perished, decomposed and gross contamination			3	19
Currants					6
Peaches				3	16
Prunes	do.		1	1	13
Raisins	do.		11	0	19
Sultanas	do.		7	0	27
Potatoes	Decomposed	15	0	0	0
Wheat	Oil contaminated	2	15	3	11
Rolled Oats	Gross contamination, dampness and rancidity		2	3	18
Oatmeal	Dampness and rancidity		3	1	10
Malt	Burnt and contaminated	2	10	0	0
Dried Eggs	Mould and dampness				22
Skimmed Milk Powder ...	Mould and dampness		1	3	4
Redcurrant Pulp	Dirt contaminated		3	0	0
Candy Sweets	Gross contaminated		9	2	16
	Total Weight ...	26	12	3	16

Table 14—**Particulars of foods detained for reconditioning at local or other food depots.**

(Forward Notices sent to the appropriate Health Authorities when damaged foods were released to reconditioning depots outside Bristol.)

Description of Food	Quantity	Reason for Detention	Weight in Tons (approx.)
Frozen Lambs	6,505	Contaminated and stained	128
Frozen Sheep	1,128	Contaminated and stained	23
Frozen Beef	2,540	Contaminated and stained	141
Frozen Pork	1,525	Contaminated and stained	31
Sheep Offal (bags) ...	71	Contaminated and stained	3
Bacon (bales)	2,257	Slight decomposition ...	205
Rabbits (crates)	60	Vermin contamination ...	2
Canned fruit (cases) ...	170	Stained cases	4
Canned meats (cases) ...	721	Stained cases	22
Lard (cases)	1.337	Stained cases	33
Dried Fruit (cases) ...	449	Contaminated	6
Canned milk (cases) ...	1,252	Stained cases	27
Cheese (pckgs.)	985	Slight deterioration ...	41
Canned Tomatoes (cases)...	137	Hydrogen swells	4
Egg Powder (pckgs.) ...	118	Stained cartons	2
Flour (sacks)	1,975	Sweat damaged	123
Total approximate tonnage involved			795

Table 15—**Food Inspection.**

Sampling under the Public Health (Preservatives, &c., in Food) Regulations, 1925 to 1940, was not carried out during 1946, as the various Commodity Officers of the Ministry of Food take routine samples for this purpose.

Quantity of Food Imported and dealt with :—

Fresh, frozen or canned meat, etc.		
Frozen Beef :		
Boneless	190,195	Qrs.
Bone-in	119,793	,,
Cuts	132,327	Bags & Pkgs.
Frozen Mutton and Lamb	1,830,242	Carcases
Frozen Mutton :		
Boneless	4,335	,,
Cuts	8,671	Packages
Frozen Pork :		
Boneless	112,272	Sides
Bone-in	57,894	,,
Cuts	46,004	Packages
Frozen Veal	8,238	Bags
,, Sundries	74,851	Packages
,, Poultry	11,213	Boxes
,, Rabbits	34,225	,,
Bacon and Hams	20,900	Tons
Canned Meat	21,552	,,
Canned Fish	3,594	,,
Fresh, dried and canned fruit, etc.		
Bananas	16,318	,,
Oranges and Lemons	20,519	,,
Other Green Fruit	9,481	,,
Canned Fruit	7,080	,,
Dried Fruit	10,636	,,
Vegetables—raw :		
Onions	114	,,
Tomatoes	74	,,
Vegetables—canned	1,223	,,
,, —in brine	210	,,
Other Foods.		
Butter, Cheese and Lard	55,581	,,
Grain	451,673	,,
Cereal products for human consumption	44,428	,,
Feeding stuffs for animals	9,096	,,
Sugar :		
Unrefined	10,216	,,
Glucose	27	,,
Molasses	10,051	,,

Imported Animals dead or slaughtered :—

Animals landed dead	Nil
Slaughtered in lairs	Nil

Appendix X.

CONSTITUTION OF THE HEALTH COMMITTEE

Chairman : Alderman J. J. Milton, J.P.
Vice-Chairman : Alderman E. T. Cozens, J.P.

Aldermen: Henley S. Evans
T. Jefferis
Mrs. C. M. Keel

Councillors: G. A. Watson Allan
Mrs. M. L. Gunning
R. N. Harrison
Mrs. M. A. Hennessy
Mrs. I. D. Monk
F. H. Moss
Mrs. A. E. Nutt
P. H. Salmond
Rev. M. Stockwood
Miss H. Strimer
A J. M. Wright, M.B., B.S. (Lond.), F.R.C.S.
Town Clerk : Alexander Pickard, Esq.
City Treasurer : E. M. Tapson, Esq.

Principal Officers also associated with the work of the department:

City Engineer: H. M. Webb, Esq.
Chief Education Officer: G. H. Sylvester, Esq.
City Valuer: W. A. James, Esq.
City Architect: J. Nelson Meredith, Esq.
Director of Social Welfare: Alexander Pickard, Esq.
City Librarian: J. Ross, Esq.
Cleansing and Transport Officer: H. M. Ellis, Esq.

PUBLIC HEALTH STAFF

Medical Officer of Health (City, Port and Schools):
R. H. Parry, M.D., B.S. (Lond.), F.R.C.P., D.P.H.

Deputy Medical Officer of Health:
I. G. Davies, M.D., M.R.C.P. (Lond.), D.P.H.

Principal Assistants:

Chief Assistant Medical Officer of Health:
James Hutton, M.D., D.P.H.

Chief Administrative Assistant:
J. G. Watson

Maternity and Child Welfare:
Marguerite G. Hughes, M.B., Ch.B. (Retired Sept., 1946)
A. I. Ross, M.D., D.P.H.

Port Health:
D. T. Richards, M.R.C.S., L.R.C.P., D.P.H.

Chest Specialist:
C. J. C. Faill, F.R.C.P., Ed.

Venereal Disease:
A. E. W. McLachlan, F.R.S.E., M.B., Ch.B., D.P.H.

Radiology:
J. V. Sparks, B.A., M.R.C.S., L.R.C.P., M.R.C.P., D.M.R.E.

Mass Miniature Radiology:
E. Evelyn Mawson, M.D., Ch.B.

Bacteriology:
K. E. Cooper, B.Sc., Ph.D., M.R.C.S., L.R.C.P., A.I.C.

Clinical Pathology:
Dorothy Woodman, M.D., M.Sc., M.R.C.S., L.R.C.P.
F. J. W. Lewis, M.B., Ch.B

Assistant Medical Officer of Health:
R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.

Chief Sanitary Inspector:
F. J. Redstone, F.R.San.I., F.S.I.A.

Matron, External Nursing Services:
Miss L. M. Bendall

Public Analyst:
F. E. Needs, F.I.C.

Veterinary Surgeon (part-time):
G. E. Henson, F.R.C.V.S.

Hospitals and Institutions:

Ham Green Hospital and Sanatorium:
B. A. I. Peters, B.A., M.D., B.C., D.P.H.

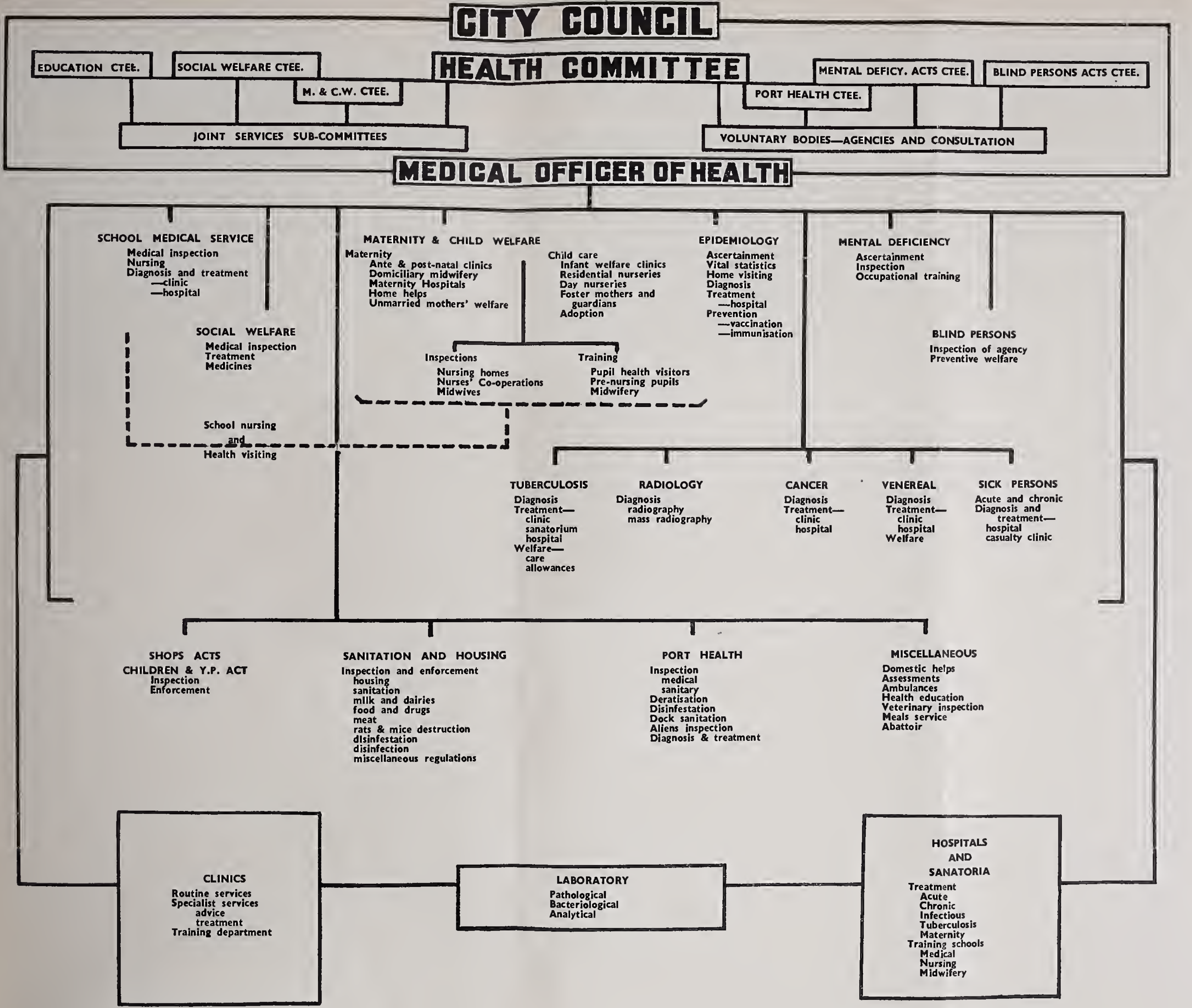
Southmead General Hospital, Snowdon Road Hospital, and Mortimer House Maternity Annexe:
P. Phillips, M.Sc., M.D., Ch.B.

Frenchay General Hospital:
W. L. Broadfoot, M.B., Ch.B.

Frenchay Park Sanatorium:
E. Evelyn Mawson, M.D., Ch.B.

Babies' Home:
Greta Hartley, M.D., M.M.

Residential Nurseries:
A. Alison Craig, M.D. (Lond.), D.P.H., D.C.H.


CITY COUNCIL
EDUCATION CTEE.
SOCIAL WELFARE CTEE.
M. & C.W. CTEE.
HEALTH COMMITTEE
MENTAL DEFICY. ACTS CTEE.
BLIND PERSONS ACTS CTEE.
PORT HEALTH CTEE.
JOINT SERVICES SUB-COMMITTEES
VOLUNTARY BODIES—AGENCIES AND CONSULTATION
MEDICAL OFFICER OF HEALTH
SCHOOL MEDICAL SERVICE
Medical inspection
Nursing
Diagnosis and treatment
—clinic
—hospital
SOCIAL WELFARE
Medical inspection
Treatment
Medicines
School nursing
and
Health visiting
MATERNITY & CHILD WELFARE
Maternity
Ante & post-natal clinics
Domiciliary midwifery
Maternity Hospitals
Home helps
Unmarried mothers' welfare
Child care
Infant welfare clinics
Residential nurseries
Day nurseries
Foster mothers and guardians
Adoption
Inspections
Nursing homes
Nurses' Co-operations
Midwives
Training
Pupil health visitors
Pre-nursing pupils
Midwifery
EPIDEMIOLOGY
Ascertainment
Vital statistics
Home visiting
Diagnosis
Treatment
—hospital
Prevention
—vaccination
—immunisation
MENTAL DEFICIENCY
Ascertainment
Inspection
Occupational training
BLIND PERSONS
Inspection of agency
Preventive welfare
TUBERCULOSIS
Diagnosis
Treatment—
clinic
sanatorium
hospital
Welfare—
care
allowances
RADIOLOGY
Diagnosis
radiography
mass radiography
CANCER
Diagnosis
Treatment—
clinic
hospital
VENEREAL
Diagnosis
Treatment—
clinic
hospital
Welfare
SICK PERSONS
Acute and chronic
Diagnosis and
treatment—
hospital
casualty clinic
SHOPS ACTS
CHILDREN & Y.P. ACT
Inspection
Enforcement
SANITATION AND HOUSING
Inspection and enforcement
housing
sanitation
milk and dairies
food and drugs
meat
rats & mice destruction
disinfestation
disinfection
miscellaneous regulations
PORT HEALTH
Inspection
medical
sanitary
Deratisation
Disinfestation
Dock sanitation
Aliens inspection
Diagnosis & treatment
MISCELLANEOUS
Domestic helps
Assessments
Ambulances
Health education
Veterinary inspection
Meals service
Abattoir
CLINICS
Routine services
Specialist services
advice
treatment
Training department
LABORATORY
Pathological
Bacteriological
Analytical
HOSPITALS
AND
SANATORIA
Treatment
Acute
Chronic
Infectious
Tuberculosis
Maternity
Training schools
Medical
Nursing
Midwifery

Appendix XI.

REPORT

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR

1946

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BRISTOL EDUCATION COMMITTEE

Chairman - Alderman F. C. Williams.

Vice-Chairman - Councillor R. St John Reade, M.A.

Special Services Committee.

Chairman - Councillor Mrs. F. M. Brown.

Chief Education Officer.

G. H. Sylvester, M.A.

School Medical Officer and Medical Officer of Health.

R. H. Parry, M.D., B.S., (London), F.R.C.P., D.P.H.

CITY AND COUNTY OF BRISTOL

Population (estimated Mid-1946)	417,090
Schools :—	
Number of School Departments	188
Average Number on Registers	47,886
Average Attendance	41,808

CITY AND COUNTY OF BRISTOL
EDUCATION COMMITTEE

REPORT

of the School Medical Officer for the year ended
31st December, 1946.

INTRODUCTION

I have pleasure in presenting the 39th Annual Report on the work of the School Health Service in Bristol. Owing to the continued shortage in the supply of paper the Report has again been prepared in an abbreviated form.

During the year the members of the medical and dental staff who had been serving with the Forces returned to duty and the staff is now back to pre-war strength.

The general health and well being of the children has been well maintained. The Senior Dental Officer, in his Report, expresses the opinion that the condition of the children's teeth has shown an improvement in spite of war-time diet and rationing (Page 12).

Since the 6th August, 1946, milk has been supplied free to all school children and the number of bottles of milk supplied free during the year has increased to 3,611,886. The number of school meals supplied during the year, both free and on payment, was 3,289,736 as compared with 2,316,105 in 1945.

The campaign for immunisation against diphtheria has been continued during the year. The number of diphtheria cases amongst school children in 1946 was 23 compared with 618 in 1940. The continued fall in the number of diphtheria cases in recent years reflects the value of immunisation against this disease. It is estimated that the percentage of Bristol children now immunised is approximately 64% (Page 19).

During the year negotiations have been carried on with the representatives of the various hospitals in the city with regard to arrangements under which the Local Authority is to accept responsibility under Section 48(3) of the Education Act, 1944, for the hospital treatment of children attending schools maintained by the Authority. Agreements were finally concluded early in 1947 whereby responsibility for the hospital treatment of school children was accepted as from 1st January, 1946.

In accordance with the terms of the Education Act, 1944, all types of appliances, including surgical shoes and apparatus, artificial limbs, spectacles and artificial eyes are now supplied free. Mr. Garden mentions in his Report that contract spectacles of an improved type and appearance are now being supplied (Page 9).

The close co-ordination between the School Health Service and all branches of the Health Department has been continued throughout the year.

The statistical tables required by the Ministry of Education appear in the statistical section at the end of this Report.

I should again like to express my appreciation and thanks to Mr. Sylvester, Chief Education Officer, and his staff and to the teachers of Bristol for their ready help and co-operation during the year.

R. H. PARRY.

STAFF.

The following staff changes have taken place during the year :—

Medical.

Dr. A. A. Dalby returned from duty with the Forces on 1st February, 1946 ; Dr. J. Hutton, Dr. A. I. Ross and Dr. J. L. S. James resumed duty after service with the forces on 1st January, 1st June and 9th September, respectively ; Dr. A. M. Fraser was called up for service with the Navy on 22nd February, 1946, and the resignation of Dr. F. T. Madge was accepted as from 31st October, 1946.

Dental.

The following members of the Dental staff resumed duty on their return from service with the forces on the dates stated :—Mr. A. H. V. Williams, Mr. J. D. Rees and Mr. E. R. Dowland on 18th March, 1946, and Mr. G. W. Vowles on 1st June, 1946. This necessitated the termination of the engagements of Mr. J. R. Gibson on the 16th March, 1946, Mr. F. M. Warren on 31st May, 1946, and the following part-time Dental Surgeons on the 16th March, 1946 :—Mr. Morgan Fletcher, Mr. G. Holt, Mr. Holder Shipway and Mr. E. F. Vowles. Miss J. M. King, dental attendant resigned on 5th March, 1946, and Miss A. Duncan and Miss M. Hayes were appointed as from 3rd June and 19th August, 1946, respectively.

Child Guidance.

Miss M. T. McBride, M.A., Ed.B., was appointed as Senior Psychologist to the Child Guidance Clinic on 1st May, 1946, to fill the vacancy caused by the resignation of Miss Dunsdon. Miss E. M. Johnson, assistant Psychologist, resigned on 31st August, 1946, and Mrs. A. Singer, Ph.D. was appointed on 1st November, 1946, to fill the vacancy.

Nursing.

Sister Pirrie returned to duty in June, 1946, after service with U.N.N.R.A.

The following appointments as untrained Adult Helpers were made during the year :—

Mrs. F. Card and Mrs. P. M. Quinn, 26th August, 1946.

Resignations were received from the following :—

Mrs. P. Palmer, 8th February ; Mrs. V. Wheeler, 31st March ; Mrs. F. Duffner, 15th June ; Mrs. B. Stone, 14th August ; and Mrs. Quinn, 15th December, 1946.

MEDICAL INSPECTION.

A complete medical inspection was made during the year of 14,950 children attending the Committee's primary and secondary schools. The tables relating to these examinations will be found in the statistical section at the end of this report.

Nurses Inspections.

The number of sessions in schools given by the nursing staff to the nurses' survey was 1,445, the number of children surveyed being 53,540. Particulars of the results of the survey appear in the statistical section at the end of this report.

Uncleanliness.

The number of visits to schools made by the nurses during the year for the purpose of examining children was 2,420 compared with 2,087 in 1945, 168,179 examinations (including 4,045 re-examinations) having been made. The number of individual children found with verminous conditions during the year was 4,903.

The treatment and cleansing of children found to have varying degrees of verminous condition was carried out in all the clinics during the year; 2,548 individual children being treated and 9,374 attendances being made. The great majority of cases were not severe and quickly cleared up after treatment. A number of the badly infested children had to be excluded from school for short periods, though this was avoided as far as possible except where there was a danger to other children, as it was felt that in this way the cases were kept under control and treatment could quickly and conveniently be given.

The use of a D.D.T. Emulsion as the standard treatment of verminous heads was commenced during the year and the Clinic Sisters report that this preparation is as efficacious as Lethane in controlling the infestation and has the advantage in that it is non-greasy and has a pleasant smell. It is thus more readily tolerated by the child and accepted by the parent.

Co-operation between nurses and heads of schools is very close and the valuable assistance given by teachers and child welfare officers is greatly appreciated.

Home Visiting.

During the year the number of visits for the purpose of " following up " defects, etc., was 4,087. Other visits in regard to uncleanliness, etc., totalled 2,154.

TREATMENT.

The total number of attendances at the clinics during the year was 249,109.

Skin Clinics.

Scalp Ringworm.

39 Cases of scalp ringworm were dealt with during the year, and all were treated at the Committee's clinics, 10 by X-Ray—29 otherwise.

The number of cases of scalp ringworm among school children referred from minor ailment clinics during 1946 was 63. Twenty-four of these were, however, subsequently diagnosed by Dr. Bell at Central Clinic as not ringworm, leaving a net figure of 39. This compares with 32 in 1945, and 38 in 1944.

The cases treated by X-Rays in 1946 and the two preceding years are as follows :—

	1944	1945	1946
Primary and Secondary Schools ..	8	19	3
Nursery Schools	1	1	7
Total ..	9	20	10

X-Ray Treatment of Ringworm.

Dr. F. Gower Bergin, M.R.C.S., L.R.C.P., who is in charge of this department reports as follows :—

" The number of cases of Ringworm in the Bristol Schools keeps very low. X-Ray treatment seems to have almost abolished it from these schools, but cases from the surrounding districts continue to come in increasing numbers. There seem to be mild epidemics in several areas outside the City.

Body Ringworm.

During 1946, 234 cases of this disease amongst school children were treated at the school clinics. This compares with 263 cases in 1945 and 262 in 1944.

Impetigo.

The school clinics treated 1,381 cases of impetigo during the year.

Scabies.

The following table shows the number of scabies cases treated in 1946 and the two preceding years.

Year	School cases	Cases under school age	Adults	
			Women	Men
1944	2,321	702	1,846	679
1945	1,520	555	1,354	537
1946	1,312	460	1,103	747

Scabies cases under treatment during the year continue to show the decline which has been experienced since the end of the war, though the drop in numbers is rather small as compared with that of 1945.

Treatment with Benzyl Benzoate solution or Sulphur cream in the case of very young children was continued during the year and the disinfection of patients' personal clothing and bedding has been carried out as before. The treatment centres at Central Clinic, Marybush Lane and Southmead Hospital were in use throughout the year.

Eye Clinics.

Mr. R. R. Garden, M.B., Ch.B., D.O.M.S., D.P.H., the Committee's Ophthalmic Surgeon, reports as follows :—

" During 1946 a total of 4,479 school refraction cases attended the clinics, including 4,434 from Primary and Secondary, 33 from Nursery schools and 12 from Special schools. Spectacles were not prescribed for 1,012 of the new cases, but a number of these children will attend for perdiodical observation. Altogether 2,100 pairs of spectacles were supplied by the appointed opticians, for school children examined through the Committee's scheme, and 9 by other opticians. In 24 cases the parents made their own arrangements for the examination and purchase of glasses.

The number of sessions given to refraction work during the year was 661.

The number of attendances at Clinics for the treatment of external eye diseases during 1946 was 5,217.

New squint cases numbering 269 and 863 from previous sessions (kept under observation or treatment), attended during the year. Of the new patients 150 were referred by the Maternity and Child Welfare Department and 18 attended from Nursery schools.

Orthoptic treatment at the Bristol Eye Hospital was again in charge of a wholetime Orthoptist, and the following table gives the figures for 1946 :

Total number of cases examined for the first time	22
Total number of cases receiving treatment during the year ..	32
Number improved	10
Number receiving treatment twice weekly at the end of the year	6
Total number of attendances during the year	381

As in previous years, most of the squint operations on Bristol school children have been carried out at Bristol Eye Hospital, and during the year a total of 82 operations for the correction of this deformity is recorded. A considerable amount of pre and postoperative work is undertaken on these cases in the Orthoptic Department, this forming a most valuable adjuvant to the actual surgical treatment.

Provision of Spectacles.

Glasses were supplied at contract prices through opticians appointed by the Committee. Particulars of numbers of spectacles supplied are given below :—

Spectacles obtained through school contract arrangements ..	454
Purchased by parents through school opticians	1,646
Purchased privately	33
	2,133

In regard to the provision of spectacles, it has been evident for some time that a better type of contract glasses would be an advantage, and samples of improved appearance, durability and shape have been selected. These are provided through the recognised opticians, and in accordance with the new Education Act are now supplied free of charge to the parents."

Defects of Nose and Throat.

The number of children found suffering from the above ailments was 2,082 of whom 223 received non-operative treatment at the Committee's clinics. Operative treatment for enlarged tonsils and adenoids at the various Bristol hospitals was given in 1,222 cases.

Aural Clinics.

Mr. Gordon R. Scarff, F.R.C.S. (E), the Aural Surgeon, reports as follows :—

" During the past year, the number of children suffering from aural defects attending the clinic was 181 (including 20 pre-school cases) of whom 96 were suffering from middle ear suppuration.

The treatment of middle ear suppuration is being carried out on the same lines as before—that is, dry cleansing of the ear followed by the insufflation of iodised boracic powder. 30 of the more chronic cases have been treated weekly by ionisation. In 8 cases the discharge has cleared up.

Where there is any focus of infection in the nose or throat, these cases are referred to the various hospitals for treatment.

The number of chronic cases continues to be small ; 35 children were attending for treatment at the end of the year, of whom a small proportion were cases of recent suppuration.

School cases for diagnosis of nose and throat conditions numbered 623 and 53 were referred from the Maternity and Child Welfare Department."

Child Guidance Clinic.

Dr. R. F. Barbour, M.A., F.R.C.P., D.P.M., the Director reports :—

"During 1946, 436 new cases were seen at the Child Guidance Clinic and 861 treatment interviews were given. All cases from the Juvenile Court who were placed on remand were examined by the educational psychologists and, where considered advisable, by the full team ; 208 Court cases were examined during the year and of these 119 were found to be below average in intelligence. Of the new cases seen, School Medical Officers and School teachers referred 44 per cent., 29 per cent. were referred by the Juvenile Court, and the remaining 27 per cent. came from other sources, mainly parents.

Miss M. T. McBride, M.A., Ed.B., was appointed Senior Psychologist on 1st May, 1946, and Dr. Adolphine Singer, Ph.D., was appointed Psychologist on 1st November, 1946.

Medical students now attend the Clinic for three demonstrations during their period of specialised study of children's diseases. All Health Visitors and University students for the Social Science Testamur also attend the Clinic for demonstrations, this in addition to lectures given by the staff on the theoretical side of the work."

ANALYSIS OF 435 CASES REGISTERED DURING 1946

Behaviour Disorders.

1.	Unmanageable	45	
2.	Temper	13	
3.	Aggressiveness	15	
4.	Jealous behaviour	–	
5.	Demanding attention	1	
6.	Stealing	73	
7.	Lying and romancing	1	
8.	Truancy	18	
9.	Sex Difficulty	20	
		—	186

Habit Disorders and Physical symptoms.

1.	Speech disorders	14	
2.	Sleep disorders	12	
3.	Movement disorders	14	
4.	Feeding disorders	1	
5.	Excretory disorders	63	
6.	Nervous Pains and Paralyses	3	
7.	Fits	2	
8.	Physical disorders	2	
		—	111

Educational and Vocational Difficulties.

1.	Backwardness	46	
2.	Inability to concentrate	8	
3.	Inability to keep jobs	2	
4.	Special disabilities	2	
		—	58

For Special Examination.

1.	Psychological Examination	14	
2.	Educational Advice	20	
3.	Vocational Guidance	1	
*4.	Court Examination	–	
5.	Admission to Special Homes and Hostels	1	
6.	Placement in Foster Homes	2	
7.	Adoption	–	
		—	38

Nervous Disorders.

1.	Fears	25	
2.	Seclusiveness	2	
3.	Depression	5	
4.	Excitability	6	
5.	Apathy	3	
6.	Obsessions	–	
		—	41

Psychotic Behaviour.

		1	
		—	1
	TOTAL		435

* Court examinations have numbered 208 during this present year and have been classified according to the particular type of behaviour disorder for which they have been referred.

DEPARTMENTAL WORK

Psychiatric.

Diagnostic Interviews	356
Physical Examinations	324
Re-examinations	63
Treatment	899
Parents	78
Others	53
Other Visits	15
School Visits	1

Psychological.

Examinations	334
Re-examinations	24
Parents	30
Treatment	58
Others	43
Other Visits	2
School Visits	1

Social Work.

Parents	977
Children	4
Others	93
Home Visits	29
School Visits	1
Other Visits	12
Lectures	19

CASES REFERRED DURING 1946

Education Authority	187
Juvenile Court	208
Parents	68
Hospitals	16
Other Agencies	17
G.P.'s	20
Outside Bristol	50
	—566

CASES CLOSED DURING 1946

Consultation	308
Supervision Satisfactory	17
Supervision Unsatisfactory	3
Treatment Improved	53
Treatment Unchanged	8
Treatment Withdrawn	9
	—398

Dental Clinics.

Mr. W. H. B. Stride, L.D.S., Senior Dental Officer, reports as follows :—

"It is now possible to report the return of all the remaining staff from the Forces. Messrs. Dowland, Rees and Williams resumed duties in March and Mr. Vowles in June. This brings the staff back to its pre-war figure of ten. Temporary use was made of Verrier Road Clinic for some months as one of the Dental surgeries at the Central Health Clinic was being used for medical work.

The number of primary and secondary school-children inspected was 37,418 and, in addition, 1,519 nursery school-children were seen. Casual cases numbered 3,370 and the number of school-children treated during the year was 22,795.

Particulars of treatment given to mothers and young children for the Maternity and Child Welfare Department are as follows :—

	Mothers		Pre-School children
	Expectant	Nursing	
New Cases	1,144	170	953
Attendances	3,397	417	1,542

This occupied 404 sessions of the dentists' time.

The treatment of the school population of 47,886 children has to be carried out by the staff of ten dentists. In addition, at least five sessions a week are occupied in the treatment of hospital and institution cases. It will therefore be seen that it will be necessary to increase the staff to satisfy the minimum requirements of the Ministry, namely, one dentist to 5,000 children. It is also necessary to take into consideration that this minimum standard is only permissible with a low consent rate. Other considerations are the raising of the school leaving age, and the desirability of reducing the present interval of approximately 12 months between inspections. The ultimate aim will be for all children to be inspected at intervals of 6—9 months. I think we should estimate, say, 3,500 to each Dental Officer, necessitating a staff of 14 or 15. The immediate need, when the proposed Clinic is available at Brislington, is the appointment of an extra dentist.

A good deal can be done by education of the parents, but we cannot attain our maximum attendances until the full scheme of clinics is complete, as the cross-country journeys present too much difficulty to many parents with young children.

We have to thank the panel of private practitioners who consistently helped us all through the war, and who gave, often at great inconvenience to their own practices, one or more sessions each week.

There is no evidence of increase of caries due to war-time diet and rationing. Indeed, rather the reverse is the case and we are often surprised by the excellent teeth seen in the nursery schools.

More sessions are needed for Orthodontic work as the very large number of Orthodontic cases which are seen every month is a strong indication that we must devote considerably more time to the temporary dentition by carrying out early treatment with fillings and silver nitrate. This is especially necessary in those cases which show an early tendency to abnormality and where early loss of temporary teeth will mean irregularity and incorrect jaw relationship. Lack of early treatment in these cases will probably necessitate a long and complicated course of corrective treatment."

It is interesting to compare the relative amount of work done in 1939 with that done in 1946.

	1939	1946
No. of children inspected	38,323	38,937
No. of children treated	20,094	22,795
No. of sessions devoted to school treatment	3,928	3,870
No. of sessions devoted to M. & C.W. treatment	325	404

Orthodontic Treatment.

Mr. Trevor Johnson, L.D.S., reports :—

"The number of cases referred by School Dental Officers for Orthodontic treatment during the year increased to 351 as compared with 282 in 1945, with a consequent increase in attendances. In July, treatment sessions were introduced at Central and Southmead Health Centres and in 25 sessions appliances for 90 of the cases, largely of the simpler type were fitted. No satisfactory arrangement for dealing with the large number of more difficult cases has yet been made. The demand for orthodontic treatment is likely to increase further and it is estimated there are 350 children per annum who will require treatment by appliances."

Attendances at the Orthodontic sessions during the year were as follows :—

New cases	351
Number referred for treatment at Dental Hospital	197
Number referred for treatment at the Committee's clinics ..	154
X-Rays taken	165
Impressions taken	484
Total attendances	1,133

Orthopaedic and Postural Defects.

Mr. Chitty, M.S., F.R.C.S., the Orthopaedic Surgeon, reports as follows :—

"Under the new Education Act, surgical boots and instruments are now supplied free of charge to the parents ; this has ensured that no case deteriorates from lack of the necessary appliances and parents are relieved of much financial anxiety. The severe deformities at one time caused by rickets have practically been abolished and the grosser degrees of adolescent spinal curvature are met with much less commonly than used to be the case.

Better infant care and the provision of school meals and milk resulting in a higher standard of nutrition have played a great part in this improvement. Children are much better clothed and shod and the general level of cleanliness and physique has risen in recent years. Many cases of children under school age are referred from the Maternity and Child Welfare Department and are thus brought under treatment when they are in an earlier and remediable stage. There is not the slightest doubt that the greater care taken of children has already resulted in a very gratifying improvement."

The following Table shows the various ailments found amongst the patients seen :—

	Age 5 yrs. and over	Age under five yrs.
Paralysis (*a*) Flaccid	45	3
(*b*) Spastic	39	24
Tuberculosis of Bones and Joints	17	2
Congenital abnormalities of Bones and Joints	39	32
Amputations	9	—
Rickets	3	3
Genu Valgum	83	71
Various (flat foot, spinal curvature, etc.) ..	858	134
	1,093	269

In addition to the above, 577 re-examinations were made during the twelve months.

Chiropody Clinic.

Mr. L. Tasker, the Committee's Chiropodist, reports :—

"There was a further increase in the number of attendances during the year—the figures being : 3,093 treatments (783 new cases) against 2,815 (688 new cases) for 1945.

Of the new cases, 671 were from Primary Schools, 98 from Secondary Grammar Schools and 14 from the M. & C.W. Clinic. The youngest patient was a child of 11 months with verrucae.

As usual, plantar warts with 475 new cases were still very numerous, but a slight falling off was noticed towards the end of the year. It is too soon to say whether this is due to earlier diagnosis at school inspections—which is undoubtedly taking place, with consequent earlier treatment, but it is an encouraging sign and it is to be hoped that this tendency will continue.

Difficulty with regard to the supply of children's shoes is still evident and no improvement appears to be likely in the near future.

During the year, some 15 cases were referred to the Orthopaedic Department with a view to operative treatment or physio-therapy.

The following is a summary of treatments :—

	Primary and Secondary Modern Schools		*Grammar Schools*	
	1st	*Other*	*1st*	*Other*
Hammer-toes	17	41	2	14
Metatarsalgia	6	2	–	1
Plantar warts	475	1,691	71	324
Pes Cavus	2	1	1	–
Foot strain	24	40	4	14
Hallux Valgus and Rigidus	11	17	3	6
Miscellaneous	136	99	17	30
TOTAL	671	1,891	98	389

Cardio-Rheumatic Clinic.

Professor C. Bruce Perry, M.D., Ch.B., M.R.C.P. reports :—

"The work of the Clinic has continued normally during the year and there were rather more examinations than last year. Unfortunately, the number of new cases of rheumatic heart disease and chorea has increased from 18 to 35. It is to be hoped that this check in the downward trend noted in previous years will not be maintained. The experiment on the prevention of relapses by sulphonamides has been concluded and the results are being analysed. It is, however, clear that the results claimed by American workers have not been substantiated."

Summary of cases attending CARDIO-RHEUMATIC CLINIC, 1946, including Primary, Secondary, and Nursery Schools.

	No treatment or restriction	No treatment but restriction of games, etc.	Treatment and school	Treatment and exclude from school	Institutional treatment	Total
NEW CASES.						
Rheumatic Heart Disease . .	8	4	—	1	14	27
Chorea	—	—	—	—	8	8
No Organic Disease . .	98	—	—	—	—	98
Congenital Heart Disease . .	10	1	1	—	—	12
Various	9	—	—	2	2	13
	125	5	1	3	24	158
RE-EXAMINATIONS.						
Rheumatic Heart Disease . .	272	51	2	5	8	338
Chorea	63	—	1	2	2	68
No Organic Disease . .	257	—	1	—	—	258
Congenital Heart Disease . .	68	21	6	1	1	97
Various	65	—	—	1	2	68
	725	72	10	9	13	829

No. of Individual children examined	625
No. of New cases for 1945	158
No. of Re-examinations	829
Total Number of Attendances	987

Asthma Clinic.

Dr. J. Hutton, M.B., Ch.B., D.P.H., who was in charge of the Clinic for the greater part of 1946, reports:—

"The Asthma Clinic has continued to be held each Wednesday afternoon at the Central Health Clinic. Its functions include those of diagnosis, treatment, and follow-up, the last having been considerably developed in the past year with most gratifying results.

The treatment of each case is decided upon after exhaustive enquiry into the history, social background and clinical condition of the patient. Specialist services are extensively utilised and mention must be included of the noteworthy results of breathing and relaxation treatment conducted by Miss Wilson, the Speech Therapist.

The paramount importance of early diagnosis and treatment cannot be over-emphasized if success is to be assured in this work.

In the well-established case of asthma, with its frequent complications, the most hopeful line of treatment is in residential open air school life.

There were 101 children seen and 211 attendances made during the year, exclusive of mothers who have attended for interview without their children."

Chest Clinic.

937 children were examined by the Tuberculosis Officer, of which 409 were old cases and 528 new. Of the latter, 24 were classified as definite pulmonary tuberculosis, 26 as cases of non-pulmonary tuberculosis and 478 as non-tubercular.

Mass Radiography.

Dr. E. E. Mawson, M.D., Ch.B., reports :—

"During the year, 3,961 children, including 3,678 school leavers were X-rayed. In 53 cases it was thought advisable subsequently to take large films. Of this number, dispensary treatment was advised for pulmonary tuberculosis in 7 cases and for other conditions in 6 cases ; hospital treatment for pulmonary tuberculosis was advised in 1 case and for other conditions in 2 cases ; a further case was referred to patient's own doctor."

Artificial Sunlight Clinic.

During 1946, 375 children of school age and 27 children at nursery schools were given a complete course of artificial sunlight treatment. Full details of the cases are given below :—

Defect	Primary and Secondary Schools			Nursery Schools		
	No. Treated	*Improved*	*Stationary*	*No. Treated*	*Improved*	*Stationary*
General Debility	143	101	42	6	5	1
Bronchitis	28	18	10	2	1	1
Coughs, etc.	12	9	3	1	—	1
Enlarged glands	15	10	5	2	1	1
Malnutrition	36	25	11	3	3	—
Other defects	141	103	38	13	8	5
	375	266	109	27	18	9

School Speech Clinic.

Northern Area.

Miss D. Wilson, F.C.S.T., reports :—

"The Speech Clinic for Northern Bristol was moved from Lime Tree House St. James' Barton, to 1 Argyle Road, St. Paul's, and work commenced at the new premises on 25th March.

Seven sessions a week have been given, six working sessions with the children and one writing session.

The attendances for the year are as follows :—

	New.	*Old.*
Stammerers	6	252
Speech Defects	5	189
Asthma	27	385
Asthma and Stammer	1	17
Asthma and Speech Defect	—	3
Stammer and Speech Defect	2	361
TOTAL	41	1,207

Of the total number of 100 cases under treatment during 1946, 38 cases were discharged during the year and 62 were in attendance at the end of the year.

Of the former number:—
13 were discharged having achieved normal speech.
5 left school.
19 ceased attendance.
1 transferred to Special School.

Number of children on the waiting list at the end of the year, 52.

Cases discharged are seen in six and twelve months' time and reports obtained from school to see if progress has been maintained.

The waiting list cannot be taken as in any way representing the number of children needing help in this area, as no survey has been taken. When Miss Cooke took a survey of the Southern Area she found 600 cases of school children needing speech help, 400 of which seriously needed help. The waiting list shows that cases of Speech Defect are very much in the majority. Many of these cases give evidence of having a low intelligence when mentally tested. They are referred to the Speech Clinic and not to the Special Schools as it is realised that it is difficult to assess accurately the intelligence of a child with little or no speech. These cases are slow and seriously hinder work that could be done for the more normal child. Yet these children are urgently needing treatment in order to discover whether deafness, mental deficiency or some psychological difficulty is the cause of the speech disability. More help is needed if these cases are to be dealt with."

Southern Area.

Miss W. Cooke, M.S.S.T. reports:—

" New cases are referred to the School Health Service, as for the Northern Area, through School Medical Officers, Health Visitors and Heads of Schools.

They are given preliminary examinations by Dr. R. Irving Bell at the Central Health Clinic, and are referred by him for aural, dental or other necessary treatment, before admission to the Speech Therapy Clinics. Audiometer tests are also given, in order to detect any possible degree of high frequency or other deafness.

With the exception of children at South Bristol Open Air School, who are under the supervision of Dr. Boulton, all cases under treatment are examined periodically by Dr. Irving Bell, who eventually discharges those completing treatment.

It should be noted that children attending for speech therapy undergo a regular course of weekly treatment, varying according to the type of case and severity of defect. Three months is a minimum period, but stammerers and severe cases of speech defect frequently need to attend over a period of several years.

Children are dealt with individually or in small groups at the approximate rate of three to the hour.

Much depends upon the degree of co-operation given by parents and teachers, as daily practice and great encouragement are required for adequate results.

Heads of Schools were invited to give their opinions as to the progress of children who had attended not less than twelve times during the year. Reports on these 73 cases were as follows:—

Marked improvement in speech	34
Moderate improvement in speech	20
Slight improvement in speech	7
No improvement in speech	7
Speech not mentioned	5

The attendances during the year are as follows:—

	New.	Old.
Stammerers	17	531
Speech Defects	29	918
Stammer and Speech Defect	1	55
TOTAL	47	1,504

Number of cases under treatment during the year:—

	New.	Old.
Stammerers	17	20
Speech Defects	29	33
Stammer and Speech defect	1	3
	47	56

TOTAL 103.

Of the total number of 103 cases under treatment during 1946, 61 were discharged during the year and 42 were still in attendance at the end of the year.

Of the former number :—

29 were discharged, 3 left school, 4 left district, 7 suspended (i.e. until further attendances are possible), 16 ceased attendance, and 2 transferred to special school."

SPECIAL SCHOOLS.

Schools for Educationally Subnormal Children.

Two additional Special Schools for Educationally Sub-Normal Children were opened during the year ; a school for 100 senior girls at Rose Green and a school for 80 juniors at Newfoundland Road. There are now three day special schools with an accommodation for 280 children and two residential schools accommodating 57 children.

The number of children on the registers at the end of the year is as follows :—

	Boys	*Girls*	*Total*
Russell Town Day Special School, Bristol ..	94	—	94
Rose Green Day Special School, Bristol ..	—	97	97
Newfoundland Road Day Special School, Bristol	21	33	54
Eastcourt House Residential School, Malmesbury	11	25	36
The Cedars Residential School, Purton ..	17	—	17

Open Air Schools.

Debilitated and physically defective children in need of open air treatment are accommodated at the day Open Air school at Novers Hill, Bristol, and at the Residential Open Air school at New Place, Porlock, Somerset.

The number of children on the registers at the end of the year is as follows :—

	Boys	*Girls*	*Total*
Novers Open Air School :			
Debilitated children	29	25	54
Physically defective children	23	25	48
New Place, Porlock :			
Debilitated children	17	18	35
Physically defective children	—	—	—

Schools for Deaf and Partially-sighted Children.

The number of children on the registers at the end of the year at the day schools for Deaf and Partially-sighted Children is as follows :—

	Boys	*Girls*	*Total*
Partially-deaf children	3	—	3
Deaf children (including 2 girls from other authorities)	12	22	34
Partially-sighted children	19	14	33

In addition to the above the following handicapped children were being maintained in Residential Special Schools on 31st December, 1946 :—

Epileptic Children.	*Boys.*	*Girls.*	*Total.*
Lingfield Epileptic Colony, Surrey	1	–	1
Chalfont Epileptic Colony, Bucks	1	–	1
Maghull Epileptic Colony	1	–	1

	Boys.	Girls.	Total.
Educationally Sub-normal Children.			
Besford Court Residential School, Worcester ..	12	–	12
Blind and Partially-sighted Children.			
Westbury Blind School, Bristol	6	6	12
Sunshine Home, Leamington Spa	1	–	1
Royal Normal College for the Blind, Shrewsbury	1	–	1
West of England Institute for Partially-sighted Children, Exeter	2	1	3
Deaf Children.			
Mary Hare Grammar School for Deaf Children ..	—	1	1
St. John's Institute for Deaf Children	1	–	1
Maladjusted Children.			
Pewsey Residential Hostel	2	–	2
Delicate Children.			
St. Patrick's Open-Air School, ...	—	2	2
Physically Handicapped Children.			
Heritage Craft School, Chailey	1	–	1
Winford Hospital School.			
Heart Cases	8	6	14
Orthopaedic Cases	9	7	16

NURSERY SCHOOLS AND CLASSES.

A number of War-time Day Nurseries were taken over by the Education Committee during the year for use as Nursery Schools, making a total of 12 Nursery Schools with an accommodation for 1,160 children. In addition there are 35 schools with nursery and baby classes accommodating 1,340 children between the ages of 3 and 5 years. Details of medical inspections and nursery schools and classes during the year are as follows :—

	Routine Exams.	*Re-exams.*
Nursery Schools	522	1,163
Nursery Classes	680	1,187

Number of Special Inspections and Re-Inspections 1,003

Classification of Nutrition.

	Number of children inspected	"A" (Excellent)		"B" (Normal)		"C" (Slightly subnormal)		"D" (Bad)	
		No.	%	No.	%	No.	%	No.	%
Nursery Schools	522	125	23.9	356	68.2	41	7.8	—	—
Nursery Classes	680	145	21.3	475	69.9	60	8.8	—	—

Treatment of Minor Ailments.

No. of defects treated in clinics and at schools and classes .. 5,861

Treatment of Defective Vision and Squint.

Errors of Refraction (including squint)	33
No. of pupils for whom spectacles were	
(*a*) Prescribed	16
(*b*) Obtained	16

Dental Inspection and Treatment.

No. of pupils inspected by the Dentist—Routines	1,519
Specials	109
TOTAL	1,628

No. found to require treatment	688
No. actually treated	282
Attendances for treatment	354
Extractions—temporary	263
Fillings—temporary	135
Administrations of general anaesthetics for extractions	142
Other operations—temporary	166

INFECTIOUS DISEASE.

Cases of measles among school children during the year numbered 108, though the number was increasing rapidly towards the end of the year. School cases of scarlet fever totalled 352, whooping cough 175 and there were three cases of cerebro-spinal fever.

The number of cases of diphtheria occurring in children of school age during the year was 23 as compared with 46 in 1945, and 2 deaths from this disease were reported. There were 3 cases of cerebro-spinal fever as compared with 2 in 1945.

Immunisation against Diphtheria.

The campaign to obtain the immunisation of all Bristol children was continued during 1946. A large proportion of the children were found to have had an immunising course two years or more previously, and these were given the single " booster " injection.

During 1946, 2,899 children of school age received a full immunising course of inoculations against diphtheria.

The complete figures for the year are as follows :—

Number given full course of immunising inoculations	2,899
Number given a " booster " injection	6,014

It is estimated that approximately 64 per cent. of Bristol school children have now been immunised against diphtheria.

It is interesting to note that diphtheria cases amongst school children in Bristol have been reduced in the last few years, from 618 in 1940 to 23 in 1946.

Diphtheria cases amongst school children.

1940	618
1941	233
1942	187
1943	152
1944	189
1945	46
1946	23

Of these 23 cases, 5 cases (2 mild, 1 moderate, and 2 severe) had received injections for immunisation against diphtheria.

PHYSICAL EDUCATION.

Mr. J. Mc A. Milne, Chief Organiser of Physical Training, reports :—

" During the year, considerable extension took place in the experimental work for Infants and Juniors, and the results have been very gratifying. It has given the children a different conception of their Physical Training lessons and they undoubtedly derive much greater benefit from these than before its introduction.

The apparatus used in the Bristol schools has created considerable interest among other Authorities, and a large number of Organisers and some Directors from all over the country have paid visits in order to see the work. At the end of July, a coloured film of Nursery, Infant and Junior work on the apparatus was produced and it is in considerable demand.

Two refresher courses for teachers in Infant and Junior schools and a games course for men teachers in Secondary schools have been held during the year. The ballroom dancing and recreative Physical Training classes commenced during the previous year were completed.

Play Centres for school children and Games Centres for youths and adults were held during the summer term on the Committee's playing fields, and a number of fields were available as Play Centres for school children during the summer holidays.

The standard of swimming has been maintained during the year and the majority of children in Secondary schools receive a weekly lesson during the summer months. A large proportion of these, especially the boys, continue to attend the baths during the winter months. A number of children in Junior schools situated near the swimming baths also receive swimming instruction, and an interesting experiment has been carried out with small numbers from a 2—7 year old Nursery school. Only the lack of swimming baths prevents further extension of this branch of Physical Education."

PROVISION OF MEALS.

At the end of the year approximately 2,040 children were receiving free meals and 16,680 on payment. Fifty kitchens were supplying meals at this time to all types of schools. Steady progress is being made with proposals for further kitchens, dining rooms and sculleries to meet the ever increasing demand for dinners.

Facilities for the distribution of dinners and milk during the holidays have continued to be made available where necessary, but the demand has not been very good. 415,659 free dinners were supplied during the year as compared with 246,975 in 1945. The number of meals supplied on payment was 2,874,077, as compared with 2,069,130 in 1945.

Milk in Schools.

On the 6th August, 1946, milk became free to all school children and a return taken in October showed that 93.48 per cent. of the children in Primary and Secondary Schools were receiving milk. 3,611,886 free bottles of milk were issued during the year.

CO-OPERATION OF PARENTS.

The number of parents present at primary and secondary school medical inspections was as follows :—

	No. Exam'd.	*Parents present.*	*Per cent.*
Entrants	4,119	3,693	89.6
Second Age Group ..	4,335	3,483	80.4
Third Age Group	3,696	1,576	42.6
TOTAL	12,150	8,752	72.3

EMPLOYMENT OF CHILDREN.

The Employment of Children Inspector reports :—

" During the year ended 31st December, 1946, there were 1,577 cases of infringement of the Children and Young Persons Act, 1933, and Byelaws made in pursuance thereof :—

By employers	884
By parents	599
By street traders	42
Prosecutions, Final Notices, Refusals, etc. ..	52
	1,577

These were dealt with as follows :—

Warned	1,525
Final Notices	20
Prosecutions :—	
taken	3
pending	1
Employment cards :—	
refused	27
revoked	1
	1,577

During the year 328 children between the ages of 13 and 14 years were registered for employment as follows :—

	Boys.	*Girls.*	
Boot and Shoe repairs	1	—	
Butchers	6	—	
Chemists	3	—	
Dairy	1	—	
Greengrocers	3	—	
Grocers	14	—	
Newspapers	281	13	
Tailor	1	—	
Library	—	1	
Domestic	—	2	
Farmer	1	—	
Firewood	—	1	
	311	17	= 328

All of the above were registered for delivering.

Two licences were issued, 1 renewed, and 1 cancelled for street trading by young persons between 16 and 18 years of age.

Public Entertainments.

Three applications were refused and 1 granted by the Committee, and 7 licences granted by outside Authorities for children to take part in public entertainments under the Children & Young Persons Act, 1933, in local theatres.

2,101 children were granted permission to take part in 43 entertainments given for charitable purposes.

Theatres, halls, dressing rooms, lodgings and schools were visited to ascertain that the conditions under which these children were employed were satisfactory."

Medical Treatment of the Pre-School Child.

The following cases were dealt with during the year :—

Eye Disease	121
Ear Disease	223
Skin Diseases	813
Minor Ailments	120
Aural Surgeon's cases	73
Eye Specialist's cases	168
Heart Specialist's cases	15
Orthopaedic Specialist's cases	269
Chiropody Clinic cases	14
Various	530
	2,346

STATISTICAL TABLES

YEAR ENDED 31st DECEMBER, 1946.

TABLE I. MEDICAL INSPECTIONS OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS.

1945	A.—ROUTINE MEDICAL INSPECTIONS.	1946
	1. Number of Inspections :—	
4,328	Entrants	4,119
1,122	Second Age Group	4,335
3,806	Third Age Group	3,696
9,256	Total	12,150
2,105	2. No. of other Routine Inspections	2,800
11,361	Grand Total	14,950

B.—OTHER INSPECTIONS.

1945		1946
48,327	No. of Special Inspections and Re-Inspections	53,320

TABLE II. CLASSIFICATION OF THE NUTRITION OF PUPILS INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

Number of Pupils Inspected	A (Excellent)		B (Normal)		C (Slightly Subnormal)		D (Bad)	
	No.	%	No.	%	No.	%	No.	%
14,950	4,128	27.61	9,557	63.93	1,258	8.41	7	.047

TABLE III. TREATMENTS.

1945		1946
24,531	*GROUP I.—Treatment of Minor Ailments* (excluding uncleanliness). Total number of Defects treated or under treatment during the year under the Authority's scheme :—	25,763

GROUP II.—Treatment of Defective Vision and Squint.

1945		Under the Authority's scheme
3,765	Errors of Refraction (including squint)	3,462
9	Other defect or disease of the eyes (excluding those recorded in Group I)	19
3,774	TOTAL	3,481
	Number of Pupils for whom spectacles were	
2,038	(*a*) Prescribed	2,123
2,013	(*b*) Obtained	2,111

GROUP III.—Treatment of Defects of Nose and Throat.

1945		Under the Authority's Scheme.
—	Received Operative Treatment	—
207	Received other forms of treatment	211
209	Total Number treated	211

TABLE IV. DENTAL INSPECTION AND TREATMENT.

1945				1946
		(1) Number of pupils inspected by Dentist :—		
32,183		(*a*) Routine age groups		37,418
3,010		(*b*) Specials		3,370
35,193		(*c*) TOTAL (Routine and Specials)		40,788
24,539		(2) Number found to require treatment		26,394
19,485		(3) Number actually treated		22,795
32,422		(4) Attendances made by pupils for treatment		36,126
	265	(5) Half days devoted to :—Inspection	319	
	3,204	Treatment	3551	
3,469		TOTAL*		3,870
	13,463	(6) Fillings : Permanent Teeth ..	15,144	
	875	Temporary Teeth ..	1,836	
14,338		TOTAL		16,980
	4,845	(7) Extractions : Permanent Teeth ..	4,521	
	24,452	Temporary Teeth ..	23,360	
29,297		TOTAL		27,881
12,289		(8) Administrations of general anaesthetics for extractions		13,019
	4,884	(9) Other Operations : Permanent Teeth ..	6,680	
	887	Temporary Teeth ..	2,265	
5,771		TOTAL		8,945

* In addition 404 Sessions were devoted to the treatment of mothers and young children.

TABLE V. VERMINOUS CONDITIONS.

1945		1946
12	(*i*) Average number of visits per School Department during the year by School Nurses or other authorised persons ..	14
136,161	(*ii*) Total number of examinations of pupils in the Schools by School Nurses or other authorised persons	168,179
4,355	(*iii*) Number of individual pupils found unclean	4,903

TABLE VI. SUMMARY OF WORK DONE DURING THE YEAR

1945		1946
	School Medical Officers :—	
516	No. of Visits to Schools for routine inspection	559
12,449	No. of Children examined at Routine Inspection in Schools ..	14,950
837	No. of Re-examinations in Schools	1,156
	Dental Surgeons :—	
33,343	No. of Children examined	38,937
19,817	No. of Children treated	23,077
	School Nurses :—	
	Cleanliness Survey.	
2,087	No. of Visits to Schools	2,420
136,161	No. of Examinations of Children	168,179
2,377	No. of Homes visited for uncleanliness	2,154
3,703	No. of Homes visited for " following-up " etc.	4,087
	Preparation for Medical Inspection.	
513	No. of Visits to Schools	582
14,386	No. of Children prepared	17,111

TABLE VII. SCHOOL CLINICS.

1945 *No. of Attendances.*		*Work.*	1946 *No. of Attendances.*
56,882	Central Health Clinic ..	Inspection clinic ; treatment of minor ailments ; asthma clinic ; ear, nose and throat clinic ; zinc ionisation ; dental treatment ; orthodontic treatment ; refraction clinic ; X-ray treatment of ringworm : treatment of scabies cases ; orthopaedic clinic ; remedial exercises ; electrical treatment ; massage and foot treatment.	62,262
1,115	Hotwells Treatment Centre	Treatment of minor ailments.	1,467
1,414	Marybush Lane Clinic ..	Scabies treatment	1,183
47,265	Bedminster Health Centre	Inspection clinic : treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction clinic.	42,521
7,208	South Bristol Baths Clinic	Treatment of minor ailments	6,845
14,376	Knowle Casualty Station ..	Treatment of minor ailments	16,083
206	Broadfield Road Clinic ..	Treatment of minor ailments	1,795
27,432	Speedwell Health Centre ..	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction clinic.	32,911
5,046	Verrier Road Clinic ..	Treatment of minor ailments	6,095
15,826	Portway Clinic	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction clinic.	16,480
26,937	Southmead Clinic ..	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment, orthodontic treatment and refraction clinic.	27,462
2,163	Russell Town Special School	Treatment of minor ailments	1,596
15,046	Novers Open Air School ..	Remedial exercises and massage ; treatment of minor ailments.	15,756
2,451	Chest Clinic	Chest Ailments	2,387
1,025	Cardio-rheumatic Clinic ..	Cases of heart disease and acute rheumatic infection.	965
8,931	Artificial light Clinic ..	Cases of anaemia and debility	8,822
1,254	Child Guidance Clinic ..		1,298
2,851	Speech Clinics		2,800
266	Orthoptic Clinic		381
237,694	Total Attendances	.. ..	249,109

The number of attendances at the Central Health Clinic does not include school children who availed themselves of the facilities offered by way of Mass Radiography.

TABLE VIII. FINDINGS OF MEDICAL INSPECTION.

1945.		1946,
12,449	Number of routine medical inspections during the year.	14,950

Defects requiring treatment or observation were as follows :—

Medical Inspection.			*Medical Inspection.*	
For Treatment	*For Observation.*		*For Treatment*	*For Observation.*
27	1	Skin diseases	36	4
428	173	Defective Vision	459	199
19	17	Squint	32	27
9	6	External Eye Disease	27	25
12	10	Defective Hearing	19	32
11	5	Otitis media and other ear diseases..	20	35
50	117	Enlarged tonsils	131	131
22	38	Adenoids	66	47
104	110	Enlarged tonsils and adenoids ..	93	111
54	49	Other nose and throat conditions ..	76	58
35	17	Organic heart disease	22	29
18	10	Functional ,, ,, ...	5	7
5	43	Anaemia	6	166
1	1	Rheumatism	3	16
—	—	Chorea	—	—
257	131	Orthopaedic and postural defects ..	271	143
—	—	Tb. Pulmonary definite	1	—
12	7	Tb. Pulmonary suspected	8	14
—	—	Tb. Glands	—	—
45	12	Tb. other forms	3	—
9	125	Malnutrition	11	194
27	—	For Milk and Meals, etc.	46	—
30	1	Uncleanliness	27	—
401	56	Teeth	259	—
274	187	Other defect or disease	451	403

TABLE IX. NUTRITION.

The classification of nutrition of children seen at school medical inspection in the last 3 years is as follows :—

	No. Inspected	A (Excellent) No.	%	B (Normal) No.	%	C (Sl.Sub.Nor). No.	%	D (Bad) No.	%
1944	7,748	1,391	17.96	5,773	74.51	583	7.52	1	0.01
1945	12,449	3,783	30.38	7,571	60.82	1,084	8.72	11	0.08
1946	14,950	4,128	27.61	9,557	63.93	1,258	8.41	7	0.047

TABLE X. NUTRITION.

NO. OF CASES REFERRED FOR TREATMENT AND OBSERVATION FROM MEDICAL INSPECTION, ETC.

1945		1946
	Routine Medical Inspection.——	
12,449	No. examined	14,950
9	Referred for treatment for malnutrition	11
27	Recommended milk or meals	46
—	Recommended C.L.O.M., etc.	—
125	Recommended observation for malnutrition	194
	Nurses' Survey.——	
49,537	No. surveyed	53,373
8	No. referred to Clinic for malnutrition	2
1,610	No. advised to have milk at school	1,217

TABLE XI. MALNUTRITION CASES SEEN AT CLINIC.

1945		1946
60	No. of cases of malnutrition seen at Minor Ailment Clinics	45

TABLE XII. MILK AND MEALS.

1945		1946
246,975	Free meals supplied	415,659
324,762	Free milk supplied (bottles)	3,611,886*

* The supply of milk became free to all school children from 6th August, 1946.

TABLE XIII. UNCLEANLINESS.

1945		1946
4,355	No. of individual children found with verminous heads	4,903

TABLE XIV. SCHOOL NURSES.

1945	Following is a summary of the Nurses' Survey for the year :—	1946
1,225	No. of sessions	1,445
49,537	No. of children surveyed	53,540
5,563	No. with defects	5,685
	Of the cases with defects :—	
536	No. already under treatment	458
1,348	No. referred to clinic doctor	1,638
1,242	No. referred to clinic Eye Specialist	1,499
659	Minor Ailments referred for treatment	709
1,610	Underweight children advised to have milk in school	1,217
157	Will attend own doctor or Hospital	147
11	Refusals	17
	Of the cases referred to Clinic Doctor :—	
905	No. requiring treatment or observation	934
12	No. discharged—no treatment or observation required	47
—	No. already obtained treatment	1
431	No. failed to attend clinic	656
1,348		1,638
	The defects referred to Clinic Doctor requiring treatment, or to be kept under observation, were :—	
183	Skin	199
66	Scabies	48
39	Eye disease	46
30	Defective vision	23
22	Ear disease	40
226	Nose and Throat	250
2	Teeth	—
5	Lungs	5
36	Deformities	58
8	Malnutrition	2
288	Other defects or diseases	268
905		939
2,087	Total number of visits to schools in respect of verminous conditions and general examination during the year	2,420
136,161	Total number of examinations made	168,179
4,045	Number of re-examinations (included in above total)	3,981

Appendix XII.

REPORT

OF THE

MENTAL DEFICIENCY ACTS COMMITTEE

FOR THE YEAR

1946

CITY AND COUNTY OF BRISTOL

COUNCIL MEMBERS.

The Rt. Hon. The Lord Mayor (Alderman G. S. James, J.P.)
Mrs. A. A. Nunn, (*Chairman*).
W. Dancy, Esq. (*Vice-Chairman*).
Miss M. A. Badock.
F. J. Burgess, Esq.
Mrs. M. L. Deverell.
Mrs. F. M. Harris.
F. S. Hazard, Esq.
Rev. M. Stockwood.

NON-COUNCIL MEMBERS.

Mrs. D. L. Collins.
Mrs. J. Soames-Thomas, B.A.
Mrs. F. V. Underdown.
Mrs. G. N. Vicary, J.P.

Alexander Pickard, Esq., C.B.E., *Town Clerk.*
E. M. Tapson Esq., F.S.A.A., F.I.M.T.A., *City Treasurer.*
R. H. Parry Esq., M.D., B.S. (Lond). F.R.C.P., D.P.H., *Medical Officer of Health.*

OFFICERS OF HORTHAM COLONY.

John F. Lyons Esq., L.R.C.P. & S.I., D.P.H., D.P.M., *Medical Superintendent.*
G. de M. Rudolf Esq., M.R.C.P., M.R.C.S., D.P.H., D.P.M., *Visiting Psychiatrist.*
John Fellows Esq., F.H.A., *Steward.*
Miss Margaret E. Hogarth, *Matron.*
Rev. H. Radcliffe Cox, *Chaplain,* (Church of England).
Rev. O. Ayres, *Chaplain,* (Non-Conformist).
Rev. Father K. Kenny, *Chaplain,* (Roman Catholic).

CONSULTING STAFF.

R. R. Garden Esq., M.A., M.B., Ch.B., D.P.H., D.O.M.S., Lond.
G. R. Scarff Esq., M.B., Ch.B., F.R.C.S., Edin.
H. M. S. Chitty Esq., M.B., M.S., Lond., F.R.C.S., Eng., L.R.C.P., Lond.
J. A. Nixon Esq., C.M.G., B.A., M.D., Camb., F.R.C.P., Lond.

MENTAL DEFICIENCY ACTS, 1913-1938.

In pursuance of Article 12 of the Mental Deficiency Regulations the appended report on the work of the Council under the above Acts for the year ended 31st December, 1946, is submitted.

Part I deals with Hortham Colony Certified Institution.

Part II deals with the domiciliary work connected with defectives carried out by the Medical Officer of Health.

Part III contains a Statement of Accounts for the year ended 31st March, 1947.

A. PICKARD,
Town Clerk.

The Council House,
Bristol.
June, 1947.

PART 1.—ANNUAL REPORT OF THE HORTHAM COLONY CERTIFIED INSTITUTION, 1946.

	Adults		Children		
	M.	W.	B.	G.	Total
Number of patients resident ...	258	260	109	70	697
,, ,, ,, on licence ...	71	58	12	5	146
,, ,, ,, at hospitals ...	7	7	—	—	14
,, ,, ,, absconded ...	4	—	—	—	4
	340	325	121	75	861

	M.	F.	Total
Number of Bristol patients resident	196	156	352
,, ,, ,, ,, on licence	52	36	88
	248	192	440
Number of Out County patients resident	171	174	345
,, ,, ,, ,, ,, on licence ...	31	27	58
	202	201	403

Movements of Patients During the Year.

	M.	F.	Total
Admitted	38	41	79
Discharged and removed	18	32	50
Written off books whilst on licence	11	20	31
Deaths	7	7	14
Removed to Mental Hospitals	3	1	4
Discharged—By Board of Control	4	5	9
By operation of law	1	2	3
Section 15 Order withdrawn	4	1	5
Licence withdrawn	1	4	5

Health of Patients.

The 3rd annual X-ray examination for the detection of Pulmonary Tuberculosis was carried out in the Colony by the Mass X-ray Unit of the Bristol Health Committee with results as follows:

No. of patients examined—miniature	717
Large films	65
No. of patients found to be suffering from active tuberculosis ... (including 4 from previous examination)	7
No. of patients becoming quiescent	2
No. of staff examined—miniature	67
Large films	7

All were found to be negative.

In addition 24 patients from the War Agricultural Hostel at Winterbourne and 14 patients from Firleaze Hostel were examined and all found to be negative.

All patients suffering from active tuberculosis are isolated and treated in the Colony. Two patients found to be active at previous examinations are now becoming quiescent.

I wish to thank Dr. Mawson, Director of Mass Radiography, for the arrangements made for this examination which was so efficiently carried out, and for the clinical examinations she made of suspected cases.

In the report on the results of the examination, the Medical Director of the Mass X-ray Department states that the incidence of tuberculosis in our patients is no greater than in the general population.

There has been little serious illness during the year and no epidemics. Isolated cases of a mild form of dysentery have occurred affecting 15 patients. In addition 9 have been found to be positive on bacteriological examination which is carried out as a routine procedure every three months on all patients who have suffered from dysentery at any time. All new admissions have had this examination.

Ninety-six patients were treated in the Colony Hospital, mostly for minor ailments, and 22 patients were sent to Southmead Hospital for surgical or medical treatment. Eleven X-rays were done at Southmead Hospital.

The visiting staff have attended as required and have examined 149 patients.

A dental session has been held each week at which 753 treatments were done.

Six hundred and fifty-nine bacteriological specimens were examined at the Bristol University Laboratory, Canynge Hall.

Licence.

No. of patients on licence at end of 1946	146
No. of patients granted licence during the year	72
No. of patients written off the books whilst on licence	31
No. of patients returned from licence during 1946	36
26 of whom were from licence granted during previous years.	
10 of whom were from licence granted during current year.	

Of the 36 patients returned from licence during 1946 :—

- 14 were from Hostels.
- 12 were from Employers.
- 9 were from Parents.
- 1 was from an Institution.

Reasons for return were :—

	Major fault of patient.	Trivial fault of patient.	No fault of patient.
Male ...	1	8	8
Female ...	3	11	5

Two patients discharged from Order under Circular 850 in previous years were returned during the year.

The large number of patients on licence is accounted for by the fact that the policy of this Committee has always been to see that any patient who is likely to make good, and where there is adequate care, is given the opportunity of enjoying this privilege. This policy has been well repaid by the large number who have made a success of the chance they have been given.

School.

During the year, the average daily attendance was 115 children. The school is divided into six classes, and the children are graded according to their Mental Age and capabilities. The higher grade children receive instruction in Reading, Writing, Arithmetic, Physical Training and Concert Work. The middle grade child who is incapable of learning 3 R. work is given special instruction in simple handicrafts, and the lower grade children are taught by means of various types of sense training apparatus, free play, eurythmics, percussion band and action songs. Special attention is given to hygiene training. Classes are held each day for some 40 adult patients so that they may benefit from instruction in reading, writing and letter writing. There are 7 members on the school staff, 6 female and one male officer. It is hoped to start a special handicraft class among the high grade boys where they will be taught basket making, rug making, weaving and raffia work of various kinds. Special attention is being given to the high grade girls in plain sewing and knitting where they are making their own pinafores and cardigans. Children of over 14 years of age attend the workshop on three afternoons a week.

Each child in the school is being mental tested in order to find the child's Social age, but the records are not yet complete.

Workshops.

Though there is still difficulty in getting materials, there is sufficient to give occupation for the usual number of patients and to provide most of our requirements of new articles, and all repairs. Patients working in the workshops are given their turn on daily work outside the Colony during the summer months, in order that they may get experience in the work which is most likely to lead to outside employment.

Farm and Gardens.

The Farm, which is under the management of the Farms Committee, provides suitable employment for both male and female patients. The lawns and gardens which received little attention during the war years are gradually becoming much more presentable since the appointment of an experienced Garden Foreman.

Apart from the vegetables provided by the Farm, a good supply has been received by the cultivation of spare places in the gardens.

Female patients were employed on the farm during the summer months.

Daily Work (outside the Colony).

Owing to the unfavourable weather, the demand for male casual labour on daily work has not been so great as in the previous year, but it is still considerable, and as many as 90 patients, including those on regular work, have been sent out in one day. The assistance given by these patients on daily work is much appreciated locally and it is satisfactory to be able to report that no complaints have been received as to their behaviour.

A small number of females are employed on daily domestic work locally. Many more could be employed in this way, but it is only safe to send those out who have shown that they can be really trusted, owing to the large number of male patients that are enjoying this privilege.

In addition to the benefit to the patients, both financially and in giving them a contact with outside conditions, this form of employment is a useful means of testing their reliability prior to granting the greater latitude of licence.

It was hoped that this arrangement of sending patients out on daily work would interest farmers in taking patients on licence, but this has not been so, as they do not take to the idea of accepting responsibility for their care, though they are very pleased with their work.

Efforts have been made during the year to establish a hostel locally for male patients and several premises have been inspected, but none of them was considered suitable.

Recreations.

The weekly programme has included dances, cinema shows (October to April) and mixed Lotto or Housy-Housy and outdoor games in season, which included football, mixed hockey, cricket, bowls and tennis.

Reading is very popular with many of the high grade patients and frequent changes of books have been possible through the assistance of the City Librarian.

Lodge crafts, toy making and fancy work have provided a pleasant occupation in leisure hours. An attractive display and sale of work of articles made in this way was held at Christmas.

The grant made for patients' pocket money was increased in December and tokens have now been replaced by cash issue.

Four regular periods of one week's leave have been granted to all suitable cases during the year, at Christmas, Easter, Whitsun and in August.

Several impromptu concerts were organised by the patients during the year.

Sixty-eight male patients had a camping holiday at Brean Down from 17th to 28th May.

Scouts and Guides.

The Guides Company has been at full strength throughout the year. In July the Company lead the March Past and gave a display of tent pitching and gymnastics at the Guide Rally at Thornbury.

The Guides Camp was held at Brean Down for 10 days in June. Weather conditions were unfavourable, but despite this they managed to get in some bathing, picnics and trips to Weston-super-Mare. In the evenings impromptu concerts and dances were arranged by the Guide Captain and her Assistants, who did not spare themselves to make the holiday enjoyable.

Twelve Guides were granted licence during the year. Parole for Guides was started in February and is working well.

The District Commissioner visited on November 22nd and enrolled Sister Fitzharris as an Acting Lieutenant.

The Scout Troop has made progress with their training. Five have passed their 2nd Class and 14 others have one or two subjects to complete. Three have secured their first-aid badges, one his trade badge.

Several concerts have been organised in which the Scouts co-operated.

All Scouts are on parole and visit the local cinema at the week ends. This is valued very much.

An evening class is held by the Scouts, in which they help each other with the 3 Rs.

The Troop were able to secure the use of Penpole Camp for two periods during the year, under the auspices of the Bristol Boy Scouts Association. The first period was from the 29th April to 6th May, when 2 Scouters and 45 Scouts spent the week under canvas; the second period from the 29th July to 6th August, the number on this occasion being 2 Scouters and 33 Scouts. The weather was not kind, but in spite of that, all had a good time and were commended by the visiting Commissioners for the high standard of scouting.

Treatment.

During the year ending 31st December, 1946, the following methods have been used, under the direction of Dr. Rudolf:—

1. Electric-convulsive therapy.
2. Treatment of enuresis with ephedrine hydrochloride.
3. Training of nursing staff as Testers.
4. Testing of patients with Doll's Vineland Test of Social Maturity.
5. Testing of patients with Wechsler's Bellevue Scale of Intelligence.

1. *Electric-convulsive therapy.*

Four patients were considered likely to benefit from the treatment on account of depression. Permission for treatment was refused by the appropriate Local Authority in one case. Another case absconded. The remaining two cases underwent a full course of treatment with good results.

(*a*) This man who had been depressed for at least 9 years, has lost his depression and is now cheerful. He goes out to daily work, which he has continued for 5 months, the longest continuous period known in the past 9 years.

(*b*) This man was silent except for occasional single words. He now speaks and has become cheerful, and is able to calculate small sums of money. He does not now require supervision over his dressing and washing.

Electric-convulsive therapy is unlikely to benefit defectives unless some abnormal emotional condition is present in addition to the mental deficiency. Cases likely to benefit from treatment are not numerous.

2. *Enuresis*

A total of 96 cases has now been treated with the ephedrine hydrochloride treatment. All were kept on charts and all were cases who wetted their beds at least once nightly before treatment. Cases were observed for periods of from 4 to 18 weeks. Of 30 cases watched for 12 or 14 weeks of treatment, the condition of 23 improved, compared with periods of from 2 to 4 weeks under observation without treatment.

The number of sheets sent to the laundry is reduced by this treatment. Eighteen male cases, aged from 10 to 24 years, were nursed by the same nurse before and during 12 weeks of treatment and the number of sheets sent to the Laundry recorded. For every 100 sheets washed before treatment, an average of 60 was washed during the treatment. As the average cost of washing an article is 1d. (exclusive of overhead charges such as power, repairs, patient labour, etc.) a saving of at least 2/2d. per week per patient was effected. Apart from wear on the bed-linen, damage to mattresses, rubber sheets and night clothes, the greater comfort of the patients who are able to appreciate their improvement, would alone be worth the expenditure on the treatment.

It appears that the ephedrine was the direct cause of the improvement, the effect of suggestion on these 18 cases being absent or slight, 12 being idiots and the remainder having Mental Ages of 3 years (3 cases), 5, 6 and 7 years. The case with the highest mental age showed no improvement.

It is hoped to publish full particulars of the methods of treatment, dosage and other details at a later date.

3. *Training of nursing staff as Testers.*

In the Army, men and women were trained to give psychological tests. Eight of the nursing staff have been trained at the Colony. As these staff were all qualified nurses with elementary knowledge of psychology and some experience of tests, the long training given to the Sergeant testers in the Army was unnecessary.

4. *Testing of patients with Doll's Vineland Test of Social Maturity*

Doll's Vineland Test of Social Maturity is a scale of behaviour. It is standardised on large numbers of individuals and covers the period from birth to 25 years of age. I have used this test for about 10 years and found it satisfactory. The test is to be given to all patients every 6 months. A record of improvement in behaviour will be obtained, expressed in terms of Social Age. The normal Social Age refers to behaviour of an individual at his chronological age. If the Social Age is lower than the Chronological Age, the behaviour of the testee is below the average for his age. During the year under review 392 cases were tested.

5. *Testing of patients with Wechsler's Bellevue Scale of Intelligence.*

The Wechsler Scale is a test of intelligence for individuals aged from 10 to 80 years of age with intelligence quotients above approximately 45. Whereas the older Merrill-Palmer and Binet-Simon tests are tests standardised on children, the Wechsler Bellevue Test was standarised on older children and adults, and allows for the decrease of intelligence due to age. As intelligence begins to decrease before the age of 30 years, incorrect results are obtained if the Binet-Simon test is used for adults, the intelligence quotient from this test being obtained by dividing by 14 or 16, the approximate age at which intelligence ceases to develop.

By a constant comparison of the I.Q. from the Wechsler in the appropriate cases, with changes in the Social Quotient (derived from the Social Age), progress in the defective's behaviour can be assessed as normal and above normal for the development of the intelligence.

It is hoped that every defective who can be tested on the Wechsler Test will be re-tested every 6 months. During the year under review, 132 cases were examined.

Maintenance.

Domestic power cables have been laid on to the main kitchen, Nurses Home, hospital and the official block. This will make it possible for electric cooking and heating equipment to be installed when available.

The coke range in the main kitchen has been removed and a steam kettle and two electric cookers have been put in.

From the boiler house to the nurses home 400 ft. of steam main has been laid. This main will eventually supply a steam kettle and a hot closet.

During the past twelve months considerable progress has been made with internal and external painting and decorating. Day Rooms and Dining Rooms on 8 lodges have been decorated and external painting and decorating of 5 lodges has been completed.

The furniture and furnishing generally are showing signs of wear and many replacements will have to be made as soon as it is possible to do so.

A telephone for the use of the staff has been installed in the Nurses Home.

Religious Services.

Church of England and Nonconformist and Roman Catholic Services have been held each Sunday, and mid-week classes for the religious instruction of high grade patients by the Chaplains have been started during the year.

Visits.

Dr. W. S. Maclay and Mr. N. C. Croft-Cohen, Commissioners of the Board of Control, visited the Colony on 26th April, 1946.

Lectures.

Lectures and demonstrations on mental deficiency have been given to medical students and social workers from the Bristol University and to the nurses taking the course in Public Health training under the Medical Officer of Health.

Staff.

All through the year there has been a great shortage of female nurses. A recruiting campaign in Eire in August yielded 8 student nurses, after many months of waiting. These have been a great help, but the number has been offset by resignations of staff who have left to get married, given up nursing or taken up general training.

Helped by returns from Service, the male staff has been practically up to full strength.

The vacancies for Chaplains created by the resignation of the Rev. F. G. Walmsley and the Rev. F. C. Feneley last year have been filled by the appointment of the Rev. H. Radcliff Cox, Vicar of Almondsbury, as Church of England Chaplain, and the Rev. O. Ayres as Nonconformist Chaplain.

Returns from Services.

Mr. F. Lucas—Male Nurse.
Mr. F. Hurcombe—Male Nurse.
Mr. J. Nelmes—Assistant Gardener.
Mr. L. Jameson—Male Nurse.
Mr. B. C. Upham—Clerk.
Mr. R. G. W. Howse—Clerk.

Mr. Jameson was awarded the Military Medal for rescuing wounded under fire in Italy.

Three male nurses and one female nurse obtained the certificate of the Royal Medico-Psychological Association in Mental Nursing.

Four male nurses and six female nurses were successful in the preliminary part of the R.M.P.A. Certificate.

The further recommendations of the Rushcliffe Committee for mental nurses and the recommendations of the National Joint Council for domestic workers have been applied.

A late bus service from Bristol for resident staff on three nights a week has been in operation since June 1946.

The Staff Sports Club has arranged regular Dances, Whist Drives and Badminton matches.

I wish to thank you, Madam Chairman, Ladies and Gentlemen for the valuable assistance you have given me by the interest you have taken in the work of the Colony, and I know that the staff would like me to express their appreciation for the kindly consideration you have given to their welfare.

J. F. LYONS,
Medical Superintendent.

HORTHAM COLONY,
ALMONDSBURY,
NR. BRISTOL.

May, 1947.

PART II.—REPORT OF THE MEDICAL OFFICER OF HEALTH.

To the Chairman and Members of the Mental Deficiency Acts Committee.

I have the honour to submit the following report on the domiciliary work of the Committee under the Mental Deficiency Acts, 1913-1938, for the year ended 31st December, 1946.

Administrative Arrangements.

The administrative arrangements for the discharge of the Council's duties under the Mental Deficiency Acts, 1913-1938, apart from the control of Hortham Colony and the collection of contributions towards patients' maintenance, continue to be carried out by specially appointed officers under the supervision of the Medical Officer of Health.

Ascertainment.

The new cases which the Local Authority were called upon to deal with during 1946 under the Mental Deficiency Acts, were:—

Number.	*Source of Information.*
49	Local Education Authority
2	Social Welfare Committee.
3	Police
13	Miscellaneous
67	

These cases were dealt with as follows:—

25	Sent to institutions
31	Placed under supervision
2	Placed under guardianship
9	No action taken
67	

In addition, on the 31st December, 1946, there were 156 educationally subnormal children in attendance at Special Schools under the control of the Local Education Authority.

The number of defectives on the 31st December, 1946, who were ascertained by the Council as being subject to be dealt with or who might become subject to be dealt with, was 1,529 exclusive of the 156 in Special Schools, an increase of 48 on the previous year.

Supervision.

On the 31st December, 1946, the number of cases under supervision was 682, compared with 660 for the year 1945.

Guardianship.

On the 31st December, 1946, the number of cases under guardianship was 113 compared with 106 for the year 1945.

Licence.

At the beginning of the year there were 115 patients on licence and during the year 68 licences were issued. Forty-nine licences were withdrawn. The number of patients on licence on December 31st, 1946, was 134.

Discharges.

During the year 19 mental defectives were discharged from Order, and 30 discharged from supervision. The numbers for the previous year were 30 and 35 respectively.

Deaths.

There were 12 deaths among the institution, guardianship and supervision cases during the year, compared with 16 for 1945.

Occupation Centres.

The following classes were held :—

	Sessions per week.		*Daily average attendance.*
Adult male	5 days	...	29
Juvenile and Intermediate ...	5 days	...	39
Low-grade Juvenile	5 days	...	11
Adult female	5 half days	...	8

The Occupation Centres provided under the Mental Deficiency Acts have been in existence for just over 20 years, and during that time have occupied seven different premises. The attendance of trainees gradually increased until in 1935 there were 120 attendees and a waiting list. At Sussex Street School, figures declined until in June, 1938, there was an attendance of only ten juveniles out of a register of 52. The removal to Kingsdown took place in January, 1940, and with a register of 121, there was then an attendance of only 57. The war period made things difficult and attendances did not take an upward movement until 1946. Practically all the adults became employed during the war and in 1945 only 23 adult males and 11 adult females were on the register.

The present position is that the register numbers 106, with a regular attendance of 87 and a waiting list of 25. It seems certain that the Committee will have to provide eventually for a register of 150, with an attendance of 120. The present premises will meet this increase, but some additional workshop accommodation may be needed. Most satisfactory progress has been made in the training of the attendees, and many expressions of satisfaction have been received from parents. The trainees are happy at the Centre and there is no difficulty in keeping regular attendances. The juveniles are engaged in the main in training to eradicate anti-social habits, exercises to relieve physical difficulties and other means to assist in improving their position in family life. Very few can benefit by academic training, but such training is given if at all possible.

The adult males are trained in the usual Occupational handicrafts, and in carpentry, painting, shoe repairing, gardening and domestic cleaning. The adult females have their own sewing class.

A mid-day meal is supplied from the Henleaze Kitchen of the Education Authority, at a cost of 6d. for each meal. Several of these meals are paid for by the attendees' parents. Milk is supplied free to juveniles under the Milk for Schools Scheme.

The Transport and Cleansing Committee undertook the conveyance of children to the Centre as from 1st November, 1946. An average number of 60 patients is conveyed daily in three cars, and three guides have been engaged to accompany the children.

During the year a great deal of work has been done at the Centre, all the work being carried out by the trainees and staff. The heavy girders placed in the school rooms for air-raid precautions have been removed, and the entrance hall, passages and classrooms have been painted. The entrance yard has been concreted and a wall built with steps to the lawn. A new entrance to allow conveyances with the children to enter the premises will be put in hand as soon as circumstances permit.

Materials for handicraft and school apparatus are becoming easier to obtain though still very expensive. As much apparatus as possible is being made in the Centre's own workshops.

The premises have been examined during the year for the purpose of fire precautions, and a report has been received detailing requirements, all of which will shortly have been complied with.

The system of rewards for patients doing useful work is proving most helpful as an incentive to advance in training. Out of a register of 106, payments are made to 17 patients in amounts from 4d. to 5/- weekly. The amount paid at present totals £4 2s. 0d. a week.

Medical Inspection.

The medical inspection and treatment of defectives attending the Occupation Centre are carried out through the clinics and hospitals attached to the Health Services of the City.

The only health difficulty encountered during the year was a few cases of scabies, which with the assistance of the Central Clinic was soon eradicated.

Two children who were subject to attacks of severe epilepsy have had to be excluded from the Centres and are being provided with home training.

Institutional Care.

Six hundred and eighty-seven patients were chargeable to the local authority in institutions, of which total 134 were absent from the institutions on licence, compared with 672 and 115 during the previous year.

R. H. PARRY, M.D.

Medical Officer of Health.

Department of Public Health,
Bristol, 1.
May, 1947.

PART III.—MENTAL DEFICIENCY ACTS COMMITTEE.

Statement of Accounts for Year ended 31st March, 1947.

EXPENDITURE.

		£
Maintenance at Hortham Colony		
Salaries, wages, etc.		29,948
Provisions		14,103
Clothing, Inmates' and Staff Uniforms		4,443
Drugs, Medical and Surgical Appliances		1,078
Fuel, Light and Water		7,203
Cleaning Materials and Laundry Wages		2,311
Furniture, Bedding, Linen and Hardware		2,183
Repairs and Alterations		3,989
Upkeep of Grounds		732
Transport and Travelling		593
Miscellaneous Expenditure:—		
Printing, Postage, Advertising, Telephone, etc.	574	
Awards to Patients	685	
Recreation and Miscellaneous	419	
Maintenance in Hospitals	560	
Refund of Superannuation Contributions and Allowances	138	
		2,376
Rents, Rates, Insurance, etc.		3,020
		71,979
Loan Charges		11,715
		83,694
Maintenance at Other Institutions		
At Institutions under Orders	15,211	
By Guardianship under Orders	6,830	
Removal and other Expenses	10	
		22,051
Occupation Centres		5,758
Supervision and General Expenditure		3,377
TOTAL EXPENDITURE		£ 114,880

INCOME.

Hortham Colony	
Occupational Training—surplus	434
Superannuation Deductions	838
Rents	273
Charges for Meals and Laundry	345
Miscellaneous	322
Patients' Earnings (proportion)	959
Ministry of Health Grant re Nurses' Salaries	5,000
	8,171
Occupation Centre	355
Maintenance of Cases	
Other Local Authorities	35,547
Contributions under Voluntary Agreements, etc.	1,594
TOTAL INCOME	£45,667
NET EXPENDITURE	£69,213